

大湾区国际创客峰会

Maker Faire Shenzhen

Maker Faire Shenzhen 2023

Event Booklet

创客今何在？
WHERE ARE THE MAKERS ?

Sponsors & Partners

Organizer	 柴火创客 CHAIHUO MAKERS	Strategic Partners	 Make: Community	 seeed studio	
Exclusive Strategic Venue Supporters and Co-organisers	 万科云城 WANLI CLOUD CITY	 培游设计 PEYOU DESIGN			
Innovative Strategic Partner	 深圳职业技术学院 SHENZHEN POLYTECHNIC UNIVERSITY				
Enabler Sponsors	 Raspberry Pi	 Bambu Lab	 NVIDIA	 CREALITY 创想三维	
Ecosystem Sponsors	 ABeam Consulting®	 WAVE URBAN RESEARCH 万科城市研究院	 泊惠®	 The Nature Conservancy 大自然保护协会	 AIRBUS
Community Sponsors	 MCG 科创教育	 安诺机器人 RobotAnno	 OpenEmbed	 ELEGOO	
	 ACEBOTT	 THUNDER ——雷宇激光——			
Supporting Partners	 IECGROUP 创意创新	 hackster.io get your projects online	 DESIGN 设计互联 SOCIETY	 深圳市数字农业促进会 SHENZHEN DIGITAL AGRICULTURE PROMOTION ASSOCIATION	
	 华秋 www.huachu.com	 KiCad	 startup grind SHANGHAI	 树莓派实验室 教程 创意 作品 论坛 硬件	
	 树莓派极客网 www.raspi.cc	 活动行®			
Project Partners	 清华大学深圳国际研究生院 Tsinghua Shenzhen International Graduate School	 深墨数据 DEEP INK DATA	 Unitree 宇树科技	 DELTRON 德创智能	
	 肯擎科技 Kenging Technology	 跨维智能 DEXFORCE	 Fashion Star Technology Limited		
Media Partners	 THE TIME WEEKLY 时代周报	 eefocus 与非凡网	 Supplyframe 四方维	 EEPW 电子工程世界 ELECTRONIC WORLD	 technode 动点科技
	 shenzhenware 深圳湾	 35斗 vcarth.com 大湾区创客联盟	 无线电	 techisms explore learn share	 深圳科技馆LIP站
Investment Partners	 中关村发展 ZGC GROUP	 中关村协同创新基金 ZGC CO-INNOVATION FUND	 IDG Capital		
	 吉富创投 GIF VENTURE CAPITAL	 罗尔投资基金 Lower Investment Fund	 KINDLE CAPITAL 晶睿资本		

Table of Contents

Chaihuo Makerspace-----2

Part 1 Event Overview-----3

Preface-----3

Event Sections ----- 4

Maker Forum-----5

Spotlight Projects -----8

Satellite Events----- 11

Part 2 Exhibitor Directory-----13

Exhibitor List-----13

Scan the code to get the PDF
version of the Event Booklet



Chinese



English

Chaihuo Makerspace



In 2011, Chaihuo Makerspace was founded by Eric Pan, the founder of Seeed Studio. The name "Chaihuo" carries the meaning of "Many people gather firewood, and the flame rises high." In 2015, Former Premier Li Keqiang visited Chaihuo and became an honorary member. Chaihuo is the first maker space in Shenzhen, and it has been operating in the open-source hardware community for a decade. It has consistently promoted the dissemination of open-source culture and the advancement of innovation and entrepreneurship, serving as a bridge for makers from both domestic and international communities to connect with Shenzhen's industrial resources.

Chaihuo operates on two fronts: online and offline. Offline operations rely on space services, including open workspaces, digital equipment manufacturing and prototyping services, community event organization, technology training for the new generation of IT professionals, IoT hardware solutions showcase and promotion, industry needs matchmaking, and consulting services. The online aspect involves establishing a nationwide member ecosystem through Chaihuo's certification system. They operate online communities to provide content on IoT technology and solutions to empower digital transformation in industries and offer opportunities for collaboration with companies. Additionally, they host the most influential annual Maker Faire Shenzhen in China, fostering a benchmark position in the domestic entrepreneurial field. Currently, they have tens of thousands of registered members, and since the official launch of the Chaihuo certification system in 2020, they have certified over 3,000 members. Some pioneering members have started incorporating the technologies and solutions provided by Chaihuo into their business services.

Chaihuo Makerspace has upgraded its position to become an "international dual innovation platform for deep industrial innovation and upgrading." They are committed to attracting international innovation talents, providing a collaborative and open environment for innovators, encouraging cross-disciplinary exchange, and facilitating the realization and commercialization of creative ideas. Simultaneously, they focus on addressing the innovation needs of traditional industries, establishing a platform for collaboration between makers and industries, and integrating global maker community's innovative solutions into the local industrial chain to promote industrial innovation and upgrading. In addition to its main branch in Shenzhen, Chaihuo has established a subsidiary in Shijiazhuang, Hebei Province, with a focus on the "technology ecosystem" theme, introducing international innovation solutions to cater to the local enterprises' needs for technological innovation and upgrading.

Over the past decade, Chaihuo Makerspace has been dedicated to driving the development of the open-source movement and dual innovation. By leveraging its connection to its parent company, Seeed Studio, it continuously brings open-source hardware technology and solutions to the community. It has served over ten thousand makers from more than 20 countries and nurtured hundreds of innovative projects. The brand influence of Chaihuo Makerspace has set an example for dual innovation platforms across the country. Particularly, since the launch of the New Generation IT Talent Empowerment Program in 2020, Chaihuo has gained recognition from China's dual innovation service platforms. They have now established partnerships with dual innovation service platforms in nearly 20 Chinese cities, collectively driving the empowerment of talent with open-source technology and its application in industrial digital transformation.

Part 1 Event Overview

Preface

Since its debut in 2012, Maker Faire Shenzhen, hosted by the Chaihuo Makerspace, has ascended as an iconic annual event for the community. Dedicated to promoting Shenzhen's hardware innovation ecosystem and bolstering exchanges with the international tech-innovation realm, this event works to project Shenzhen's technological innovations onto the world stage and ardently supports the Belt and Road Initiative. By highlighting the most recent achievements from the global maker community, Maker Faire Shenzhen seeks to catalyze industry advancements rooted in grassroots innovation.

With representation from nearly 100 countries and regions, it is not only a hallmark gathering within the international innovator community but also serves as a prime avenue for dialogue and collaboration between the industry and makers. Situated at this juncture, the event emphasizes the integration of technological innovations with traditional sectors, propels mutual exchanges within the maker community, explores the vast horizon of innovation, and showcases the makers' endeavors in achieving technology amalgamation and context-driven applications.



Event Sections

Section	Date	Time	Content	Location
Maker Exhibit	Nov. 11-12th	10:00-17:00	Cutting Edge Technologies Industrial Solutions Technology Education Tech Services	Area A-G
Maker Forum	Nov. 11th	09:00-12:00	Through the Cycles	Lecture Hall, Area B
		14:00-18:00	Tech for Good	
	Nov. 12th	09:00-12:30	Cyber Farms	
		14:00-18:00	Things w/ AI	
Industry Innovation Workshop	Nov. 11-12th	10:00-17:00	Advanced Perception System Workshop TinyML Workshop New Tech-Enabled Farmers Workshop	Workshop Area
	Nov. 11th	10:00-12:00	AMD KV260 Vision AI Development Kit Experience Workshop	Shared Meeting Room 3
	Nov. 12th	10:00-11:00	Remote Access Experience Workshop for SBC Based on NXP 8ULP	
Interactive Experience Workshop	Nov. 11th	10:00-17:00	one sen Magnetic Fluid Speaker DIY Workshop one sen All-terrain service robot DIY Workshop one sen Automatic Music-Playing Robot DIY Workshop one sen Smart Watering System and Dimmable Cube Light DIY Workshop	F05
	Nov. 11-12th	10:00-17:00	Eco-Friendly Storage Bag Design and Production Workshop Eco-Friendly Material Robot Workshop Gravity-Powered Car Workshop Toothbrush Robot DIY Workshop	Used Object & Robot DIY/ Mini Factory Interactive Area
			Badge Soldering Workshop	Souvenir Shop
			Multi-Platform Interaction Optimization Workshop	E06
			MicroCodeMicroCode Icon-Based Programming Workshop	B07
			Pyramid Puzzle Workshop	G29
			Robot Waterbomb Challenge Workshop	B21-22
			3D Printing Nameplate Customization Workshop	A03
			Experimental Workshop on DNA Extraction	D01
			Laser Crafting Workshop	G32
		14:00-16:00	Attach Anything Anywhere	B15
Robot Combat Tournament	Nov. 11-12th	10:00-17:00	Robot Combat Tournament	Robot Combat Tournament Area
Maker Party/ Seeed Studio 15th Anniversary Party (Invitation Only)	Nov. 11th	19:00-22:00	Live Band & Networking	Area C, Vanke Design Commune

Maker Forum

The Maker Movement, which emerged in the early 21st century, has had a profound impact on individuals by promoting concepts such as innovation, autonomy, sharing, and collaboration. The widespread adoption of digital manufacturing, open-source hardware and software, and other tools has dismantled traditional barriers to innovation, enabling greater participation in the realms of creation and invention. This movement has gained global popularity, with some individuals abandoning the pursuit of innovation while others persist on the path of embracing it.

Under the theme "Where Are The Makers," this year's forum at Maker Faire Shenzhen aims to explore the developmental trends within the maker movement, as well as explore the vast potential and opportunities for future pathways and value realization. Furthermore, we also seek to highlight the innovators who continue to drive advancements in various industries. We aim to explore specific scenarios where the innovations have been implemented, examine how the makers navigate the challenges with emerging technologies, and showcase their efforts and stories in promoting digital transformation.

At this year's Maker Forum, we have scheduled four sections over two days: 'Through The Cycles,' 'Tech for Good,' 'Cyber Farms,' and 'Things w/ AI.' For each of these sections, we have a strong lineup of renowned speakers who will share their insights and engage in discussions on these topics. Don't miss this excellent opportunity to explore the world of innovation with us!

Through the Cycles

Nov 11th 09:00-12:00

In this session, we cordially invite partners who contribute to the advancement and development of the global maker movement to engage in comprehensive discussions centered around innovation, co-creation, and openness. Through the lenses of "open-source hardware, open community, innovation lab, digital fabrication, innovation incubator, and digital country," our esteemed speakers will share their invaluable insights on the developmental trends within the maker movement, as well as explore the vast potential and opportunities for future pathways and value realization.



Eben Upton

Co-founder of Raspberry Pi Foundation, CEO of Raspberry Pi Ltd



Dulesha Kulasooriya

Asia Pacific Innovation Leader and Managing Director at Deloitte Center for the Edge



Eric Pan

Founder & CEO at Seed Technology Co., Ltd.



David James Groom

Community Editor at Make Community, LLC



Ye Tao

CEO at Bambu Lab



Henri Pang

Greater China Region Strategic Representative at Kickstarter P.B.C.



Chirag Sharma

Senior Analyst at Druk Holding & Investments

Tech for Good

Nov 11th 14:00-16:00

In this session, we will shine a spotlight on the dynamic individuals leading sustainable innovations across diverse fields and industries. This esteemed group comprises experts, technology pioneers, business executives, and entrepreneurs. Our objective is to collectively delve into the transformative power of makers as they drive the sustainable development of multiple industries within the realm of industrial digitization. By listening to their inspiring stories of innovation, we will examine the seamless integration of technological advancements in various sectors and explore how it propels industrial upgrades across multiple domains.



Grace Zhang

Startup Grind Shenzhen
Director



Alex Qian

Director of Vanke Urban
Research of China Vanke
Co., Ltd.



Jing Ouyang

Chairman at Shenzhen Deep
Blue Data Digital Agriculture
Technology Co., Ltd.



Kate Armstrong

Fab City Foundation
Strategy Director,
Executive Board



Chirag Sharma

Senior Analyst at Druk
Holding & Investments



Cesar Jung-Harada

Associate Professor at
Singapore Institute of
Technology



Jinger Zeng

Contest Manager at
Hackster.io, an Avnet
Community



Andrea Magelli

Co-Founder at Future
Food Institute



Felix Leung

Climate Change Fellow for
The Nature Conservancy
(TNC) Hong Kong



Jessica Zhou

Head of Innovation
Startup Department at
ABeam Consulting China



Lit Liao

Founder of Litchee
Lab, a curriculum
design studio

Cyber Farms

Nov 12th 09:00-12:30

In the midst of rural landscapes, digital technology is playing a pivotal role in fostering the development and revitalization of rural areas, infusing them with vitality and optimism. This session provides a valuable platform for experts from various sectors such as businesses, government, and technology to share valuable insights and exemplary practices. Together, we will explore the significant contributions of digital technology in agricultural and rural development, its capacity for innovation, and its unwavering commitment to social and environmental sustainability. Attendees of this session will gain a comprehensive understanding of the current state and emerging trends in digital rural development. Moreover, they will gain insights from practical applications of digital technology in this context, while actively engaging in meaningful dialogue and collaboration to foster sustainable rural development.



Xufang Fan

Secretary-General
of Shenzhen Digital
Agriculture Association



Joey Jiang

Vice President at Seeed
Technology Co., Ltd.



Lie Deng

President of Shenzhen
Digital Agriculture
Association



Cuixia Li

Head of Intelligent Equipment
R&D at Shenzhen Institute of
Modern Agricultural Equipment



Yuxuan Li

CTO at Shenzhen Wugu
Network Technology Co.,
Ltd.



Niraj Prajapati

CEO at Kinghoo AgroTech



Jieru Chen

Co-founder at Shenzhen
Deltron Intelligent
Innovation Technology
Co., Ltd.



Zhenzhen Tao

Head of Three Rural Issues
Business Management Center
at China Pacific Insurance Co.,
Ltd., Shenzhen Branch



Daou Peng

Vice General Manager at
Beijing MLog Meteorological
Technology Co., Ltd.



Fuyun Yang

Founder at Etfield
(Chengdu) Agri-Eco Tech
Co., Ltd



Kevin Yang

Product Director at Seeed
Technology Co., Ltd.



Rain Ye

General Manager at
Shenzhen Chaihuo Maker
Services Co., Ltd

Things w/ AI

Nov 12th 14:00-16:00

With its rapid development, AIGC is seamlessly integrating with diverse industries and emerging as a significant catalyst for industrial advancement. Now, it has the capability to operate on intelligent edge devices and hardware. In order to foster stronger connections between investors and entrepreneurs in the AI and hardware domain, we are collaborating with IECG SynergyHub to present a session that explores the myriad possibilities within the realm of Things with AI. This session will bring together industry clusters, experts from scientific research institutions, and investment firms to delve into the application and future prospects of AI technology in the hardware sector. Our aim is to identify and support exceptional innovative startups and teams, thereby contributing to the development of Shenzhen's urban industry clusters.



Eric Hui

Founder & CEO at IECG



Richard Zhang

CSO at Seeed Technology
Co., Ltd.



Kery Peng

Amazon Web Services
Startup Team



**AI/2 AI + Hardware
Startups Project Sharing &
Pitch**

Scan the QR code to learn more.



Spotlight Projects



Smart Dancing Umbrella

Area B, 2nd Floor
Rooftop Garden

This is a climate-responsive automation device that can automatically change its form based on factors like temperature, solar radiation, and wind intensity. It provides people with a more comfortable outdoor space. It can be applied in industries such as the Internet of Things and architecture.

Organization: Institute of Future Human Habitats, Tsinghua Shenzhen International Graduate School



Have Fan

Area A, Floor B1

This is an outdoor environmentally responsive installation. Inspired by the traditional folding fan, it incorporates a three-dimensional structure to enhance both its structural integrity and visual appeal. Originating from the hot and humid climate of Shenzhen, we conducted parametric modeling to account for various climate conditions and architectural configurations of the site. Machine learning techniques were subsequently applied to predict and optimize the Universal Thermal Climate Index (UTCI) in real-time, ensuring optimal control. Such technology finds applications in industries like the Internet of Things and architecture.

Organization: Institute of Future Human Habitats, Tsinghua Shenzhen International Graduate School

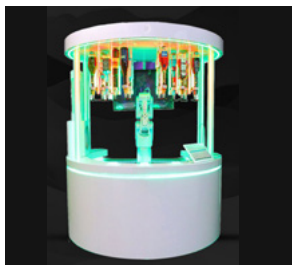


"SmartFruit" Portable Non-Destructive Fruit Testing Device

No. C33

"SmartFruit" is the world's first non-destructive fruit rapid testing device covering multiple varieties and indicators. It's a revolutionary innovation that allows a single device to non-destructively test various indicators of different fruit varieties. The testing indicators include internal sugar content, acidity, lesions, dry matter, moisture content, etc. It also features a business intelligence system, cloud-based data storage, supports data statistical analysis and visualization, assisting in origin quality screening. It is primarily used in the fruit industry and is suitable for scenarios such as quality inspection by quality inspection agencies, fresh retail quality inspection, origin quality screening, and consumer use.

Organization: Shenzhen Deltron Intelligent Innovation Technology Co., Ltd.



AI Robot Bartender

No. B01-B02

The Anno AI robot bartender employs advanced artificial intelligence technology, featuring intelligent recognition capabilities and automated cocktail-making procedures. Simply select your preferred liquor and flavor through the touchscreen interface, place your order with a single touch, and the robot bartender will automatically craft the perfect drink. It can be applied in various settings such as bars, KTVs, exhibitions, weddings, airport VIP lounges, shopping malls, restaurants, scenic spots, schools, offices, amusement parks, and star-rated hotel restaurants, among others.

Organization: RobotAnno (Shenzhen) Co., Ltd.



Mission Pack

No. A06

An advanced perception system practice box integrating intelligent devices and sensors realizes the perception, collection and analysis of environmental data of equipment or working conditions. It opens the way from the physical world to the digital world, realizing a complete solution of the cloud-pipe-side end. Through high-precision perception capability and intelligent data processing, the system is able to provide environmental monitoring, equipment status tracking and data analysis, providing users with a full range of intelligent decision-making support, and realizing the necessary equipment for AIoT and digital transformation.

Organization: Seed Technology Co., Ltd.



Cassava Industry Data Application Project

No. C29

Through the integration of the core data of the national cassava industry technology system, it provides one-stop cassava industry digital services such as digital consulting access, intelligent Q&A, expert reports, industry white papers, and base fixed production measurement. Based on the data analysis model of cassava industry production chain and supply chain, we have established a whole industry chain cost-effectiveness analysis system. It can serve cassava planting bases and starch processing enterprises, as well as cassava research-related scientific research institutions.

Organization: Deep Blue Data Engineering Technology (Shenzhen) Co., Ltd.



Quadruped Robot Go2

No. G01

This is Go2, a new species of body intelligence developed by Unitree Tech, equipped with self-developed 4D ultra-wide-angle LiDAR, with 360° *90° ultra-wide-angle sensing capability, realizing all-terrain sensing. The GPT model empowers Go2 to better understand the world and make decisions. Go2 can perform a variety of action postures such as jumping, stretching, shaking hands, lunging, crouching and so on.

Organization: Unitree Robotics Co., Ltd.



Walking Assisted Robot

No. G02

The Ant-H1 Pro walking assisted robot is a highly integrated core technology of ergonomics, power, electronics and AI algorithms, which can sense small movements of the lower limbs and output power in a timely manner to help users walk with ease; the reverse resistance mode can accurately exercise the core muscles of the walking and train physical fitness. The device is also suitable for the elderly, for those who have a small stride length and need any single-leg assistance, they can find the corresponding preset exercise mode.

Organization: Shenzhen Kenqing Technology Co., Ltd.



Project North Star

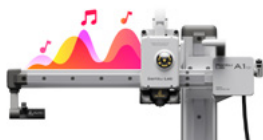
No. D06

The North Star Project is an open-source, modular, powerful, and technically accessible virtual augmented reality (AR) headgear initiative. With the aim of delivering the ultimate AR user experience, it boasts features such as an extensive field of view, low-latency gesture tracking, eye tracking, single-wire connectivity, high-resolution displays, modular design, and cost-effectiveness. This device finds applications across various industries, including education, healthcare, tourism exhibitions, smart cities, holographic shared offices, virtual gaming, IoT, and more.

[Organization:](#) CombineReality

打印机之歌

A1 mini 可以在没有扬声器的前提下演奏电子音乐。通过驱动 3 个振动电机，产生特定振动频率，它可以同时播放多达 3 首音乐。使用 MIDI to GCode 生成器，使用你喜欢的 MIDI 文件生成可播放音乐的 Gcode，让 A1 mini 陪你唱遍小调。

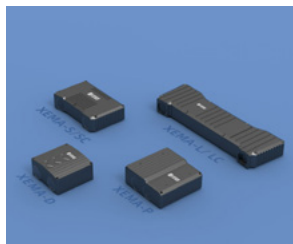


Singing 3D Printer

No. A03

The A1 mini is the latest entry-level high-speed multi-color 3D printer introduced by Tuo Zhu. It sets a new industry standard by featuring motor-driven active noise reduction and dynamic flow calibration functions. To align with its product positioning, Tuo Zhu has integrated sound interaction features into the A1 mini. Even without built-in speakers, it controls the motors to produce sound at key moments during the printing process, allowing users to monitor the printer's progress. Currently, the A1 mini can provide audible cues at the beginning and end of a print job, enhancing user interaction. As a result, the initial idea has evolved into a delightful Easter egg feature called "The Printer's Song," adding an element of fun to the 3D printing journey.

[Organization:](#) Bambu Lab



XEMA Arctic Gull Series Open Source Cameras

No. B19

The XEMA Arctic Gull series open-source camera utilizes active structured light technology, offering fast capture speeds, high-quality imaging, and a mature and stable solution. It can generate high-quality point cloud data for different application scenarios, with high precision, fast processing, and strong adaptability to various environments. It is suitable for a range of applications, including workpiece loading and unloading, barcode stacking and unstacking, robot vision guidance, and more.

[Organization:](#) Kua Wei (Shenzhen) Intelligent Digital Technology Co., Ltd.



3D Printed Formula Race Car

No. A02

Through 3D printing, automotive designers can rapidly create prototypes of physical parts or components, ranging from simple interior elements and dashboards to even scale models of entire cars. Rapid prototyping enables businesses to transform ideas into convincing physical prototypes, which can then be iterated into high-fidelity prototypes closely matching the final product. These prototypes guide the product through a series of validation stages, ultimately leading to large-scale production.

[Organization:](#) Shenzhen CreatBot Technology Co., Ltd.

Satellite Events

Shenzhen, an important city for innovation and entrepreneurship in China, is known as the "City of Makers." It not only has a complete industrial chain and advanced technology research and development environment, but also boasts a vibrant innovation ecosystem and numerous innovative enterprises. The city's entrepreneurial culture and sense of community make it an ideal destination for global makers to explore, learn, and exchange ideas.

This year, we will introduce concurrent event as a bridge between different cities within the Greater Bay Area. By connecting global makers with the technological ecosystem of the Greater Bay Area, we aim to provide our participants with a deeper and more diverse experience of the technological charm of the region. The concurrent event will provide an efficient and comprehensive opportunity for attendees to understand the technological ecosystem of the Greater Bay Area. Through interactive salons, flash talks and offline gatherings, entrepreneurs, investors, scholars, and experts from around the world can communicate and collaborate, exploring new opportunities and challenges in technological innovation.

Nov 10th

Open Source Hardware and Digital Manufacturing Course Design

Nov 10th 9:00-17:00

Shenzhen No.2 Senior High School / Guangdong Science and Technology Education Zhou Maohua Master Teacher Studio / Lei Yu Laser

Shenzhen No.2 Senior High School

The combination of open source hardware and digital manufacturing (laser processing technology) provides infinite and diverse possibilities for science and innovation education in primary and secondary schools. In order to promote the development of science and creativity education in China, help the professional growth of master teachers of creativity education, lead the creativity teachers to pay attention to the science and creativity activities of open-source hardware and digital manufacturing (laser processing technology), enrich the teaching content of open-source hardware and digital manufacturing (laser processing technology), and improve the level of curriculum design, the workshop is scheduled to be held on Nov. 10 at the No. 2 Senior High School in Shenzhen. The seminar will be held on November 10 at Shenzhen Second Senior High School.

Nov 11th

NVIDIA Edge Computing and Robotics Symposium

Nov 11th 14:00-17:00

NVIDIA

Chaihuo Maker Space

NVIDIA Edge Computing and Robotics Symposium will invite NVIDIA technical experts and partners to share NVIDIA Jetson platform technology, related industry applications and solutions, discuss the latest progress and industry solutions in the field of autonomous machines and edge computing, and exchange the opportunities and challenges of the future development of edge AI. You are cordially invited to participate.

Nov 12th

Untitled Edge Meetup

Nov 12th 10:00-11:30

Deloitte Center for the Edge & Chaihuo Maker Space

Shared Meeting Room 3, Vanke Design Commune

This engaging meetup is set to bridge the gap between the realms of AIoT, focusing particularly on grassroots digital transformation in developing countries. With the stage set for meaningful conversations, we invite you to be part of this dynamic session.

Raspberry Pi Meetup

Nov 12th 14:00-16:00

The official Raspberry Pi team

Chaihuo Maker Space

The official Raspberry Pi team has specially planned a Raspberry Pi Meetup for Raspberry Pi users and enthusiasts, where you can meet with the official Raspberry Pi team and other Raspberry Pi enthusiasts face-to-face to share technology, ideas and projects.

KiCon (KiCad Conference)

Nov 12th 09:00-18:00

KiCad Community&Huaqiu Electronics

AliCloud Innovation Center, Futian District, Shenzhen

KiCon(KiCad Conference), Held in the fall of each year. The conference series brings together people who use and love KiCad to share ideas, experiences, learnings, and more.(Details:<https://mp.weixin.qq.com/s/bhqPTP3JWU5mjlb79U5KlvA>)

Fenong Holdings Visiting Activities

Nov 12th 16:30-18:00

Seed and Fenong Holdings

Creative City Nanshan, Shenzhen

The satellite activity of "Entering Fengnong DAP Digital Intelligence Agricultural Service System" includes visiting the exhibition hall of Fengnong Holdings, sharing the Digital Intelligence Fengnong DAP management system, and holding discussions and exchanges. The "Digital Intelligence Farming DAP Management System" is a scientific and practical intelligent agricultural decision-making support service system based on the data and experience accumulated by Fenong Holdings for many years in agricultural services and utilizing modern digital intelligence technology, and is also an important development and promotion technology of Guangdong Province (Shenzhen) Digital Intelligence Farming Services Industrial Park.

Nantou Ancient Town Co-creation Symposium

Nov 12th 16:00-18:00

Fab City/ Vanke Urban Research

Nantou Ancient Town

"Vanke Urban Research," "Seed Studio" and "Fab City" is dedicated to the transformation of Nantou Ancient Town in Shenzhen. The initiative aims to drive urban sustainability and integrate digital technologies. As a satellite event of the Greater Bay Area International Maker Summit, the Nantou Ancient Town Co-Creation Workshop provides a platform for advocates of urban transformation to exchange ideas. This event not only offers the opportunity to experience innovative digital solutions deployed on-site by Silicon Logistics Technology but also delves into how digital technologies can inject new vitality into the city's sustainable development.

MG Space Maker Night

Nov 12th 20:00-22:00

MG Space

MG Space, FuTian, Shenzhen

MG Space cordially invites maker enthusiasts to come together for a chat, sharing our "why we create" stories. We welcome you to share your own experiences and journey as a maker. On-site, there will be immersive hands-on workshops that you can participate in. If you require assistance, MG is also willing to collaborate on workshop organization solutions. Hi, Makers, let's have a conversation! Feel free to sign up as a guest speaker.

Nov 13th

Hi Tour

Nov 13th 08:30-18:30

Seed Studio

Seed Agile Manufacturing Center/ PCB Factory/Mold Processing Factory

Through a one-day Shenzhen Manufacturing Tour, we will lead you on factory visits, providing a close-up observation of actual operations in manufacturing processes, production efficiency, quality control, and more. You will have the opportunity to personally experience the allure of high-tech equipment and intelligent manufacturing technology.(Details:<https://mp.weixin.qq.com/s/-jRkWbF82UPMnqCOggRk4g>)

Nov 18th

Tech BBQ

Nov 18th 13:00-20:00

iMakerSpace & Trouble Maker

A2, iMakerbase, Hangcheng Avenue, Bao'an District, Shenzhen

TechBBQ is the largest and most influential tech event in the Nordic region. After its debut in Denmark, TechBBQ's first stop outside Denmark is Shenzhen. The event includes sharing sessions at international institutions in Shenzhen, presentations from local entrepreneurial projects, keynote speeches, roundtable forums, workshops, and social gatherings with barbecue and free networking sessions.

Part 2 Exhibitor Directory

Exhibitor List

PiTech Solutions (A011-A014) ----- 16

A011	Clockwork Tech LLC -----	16
A012	52pi -----	17
A013	BIGTREETECH -----	18
A014	Hunan MAKEROBO Intelligent Technology Co., Ltd -----	19

Enabler Sponsors (A02-A09) ----- 20

A02	Crealiti 3D -----	20
A03	Bambu Lab -----	21
A04	Shenzhen Polytechnic University -----	22
A05	Raspberry Pi -----	23
A06	Seeed Studio -----	24
A07	NVIDIA -----	25
A08	Chaihuo Makerspace -----	
A09	Souvenir Shop -----	

Ecosystem Sponsors (A10-A14) ----- 26

A10	ABeam Consulting -----	26
A11	Vanke Urban Research -----	27
A12	Airbus China Innovation Center -----	28
A13	TNC, The Nature Conservancy -----	29
A14	Bo Yu -----	30

Community Partner Sponsors (B01-B06) ----- 31

B01-B02	RobotAnno (ShenZhen) Co., Ltd. -----	31
B03	MG -----	32
B04	ACEBOTT -----	33
B05	ELEGOO -----	34
B06	OpenEmbed -----	35

Enterprises and Startups (B07-B27) ----- 36

B07	KittenBot -----	36
B08	Petoi -----	37
B09	Gadget Labs -----	38
B10	M5Stack -----	39
B11	LIChuang open source hardware platform -----	40
B12	JLCCAM 3D Printing -----	41

B13	LILYGO-----	42
B14	ABeam- SZ -----	43
B15	LumeoTech -----	44
B16	Yahboom-----	45
B17	Guidan Robot-----	46
B18	Arducam -----	47
B19	DEXFORCE -----	48
B20	WORLDSEMI-----	49
B21-B22	I Create Robot -----	50
B23	Elecrow-----	51
B24	RuiTai Technology (Shenzhen) Co., Ltd. -----	52
B25	Shenzhen GuNong Technology Co., Ltd. -----	53
B26	Anhui Baifulian Display Technology Co., Ltd. -----	54
B27	JIN FENG BIOLOGY-----	55

Cyber Farms and Digital Agriculture (C28-C37) ----- 56

C28	Sseed Sudio - IoT Application Group -----	56
C29	Shenzhen Deep Blue Data Digital Agriculture Technology Co., Ltd.-----	57
C30	Etfield (Chengdu) Agri-Eco Tech Co., Ltd-----	58
C31	China Pacific Insurance Co., Ltd. -----	59
C32	Beijing MLog Meteorological Technology Co., Ltd.-----	60
C33	Shenzhen Deltron Intelligent Innovation Technology Co., Ltd -----	61
C34	Kinghoo AgroTech Co., Ltd-----	62
C35	Shenzhen Fengnong Holdings Co., Ltd. -----	63
C36	Shenzhen Institute of Modern Agricultural Equipment -----	64
C37	Shenzhen Digital Agriculture Association -----	65

Individuals and Teams (D01-D16)----- 66

D01	Shingo Hisakawa-----	66
D02	The Nekolympic-----	66
D03	Alula_FPV -----	67
D04	Eun Kim -----	67
D05	Team Park Minsu -----	68
D06	CombineReality -----	68
D07	Takahiro Okada-----	69
D08	Music laboratory -----	69
D09	Takuya Ichise-----	70
D10-D11	Nico-Tech Shenzhen -----	70
D12	ikkei -----	71
D13	ShigeLabo Tokyo -----	71
D14	AIRMAMA-----	72
D15	Andrei Mironenko-----	72
D16	POWAR STEAM - Pablo Zuloaga Betancourt -----	73

Universities (E01-E13) ----- 74

E01-E02	School of Intermedia Art, Guangzhou Academy of Fine Arts -----	74
E03	School of Design and Innovation, Shenzhen Technology University -----	75
E04-05	New Media Art Department & Design Academy, Sichuan Fine Arts Institute-----	76
E06	I-I Group, School of Design, Southern University of Science and Technology -----	77
E07	Institute of Future Human Habitats, Tsinghua Shenzhen International Graduate School ---	78
E08	Southwest Jiaotong University -"Codes to Things: Making What You Thinking" -----	79

E09	Southwest Jiaotong University - Dihuo Aurora Team -----	80
E10	Georgia Tech Shenzhen Institute, Tianjin University - Fengmang Intelligent Manufacturing Team-----	81
E11	International Design Institute, Harbin Institute of Technology (Shenzhen)-----	82
E12	Fab Lab Innovation Center, Guangzhou Xinhua University-----	83
E13	Xi'an Peihua University Maker Center -----	84

Individuals and Teams (F01-F08) ----- 85

F01	Southwest Jiaotong University-ZeroLab Education Team -----	85
F02	Southern University of Science and Technology, School of Design, Immersive Design Group-----	86
F03	Taikoo Primary School (Hong Kong China) -----	86
F04	L.S.T. Leung Kau Kui Primary School (Branch) (LST-LKKB) -----	87
F05	one sen Makers-----	88
F06	Hong Kong Buddhist Ho Nam Kam College Robotics Development Team -----	89
F07	epis Education Centre Wakaba Shenzhen Classroom -----	89
F08	Shenzhen Zhongke Co-creation Education Research and Development Center - Maker Education Achievement Exhibition -----	90

Individuals and Teams (Specially Invited) (G01-G31) ----- 91

G01	Yushu Technology -----	91
G02	Kenqing Technology Exoskeleton Robot R&D Team -----	92
G03	EMBER -----	93
G04	Maker: Chen Ziping -----	94
G05	Tsinghua University -Worldshare Team-----	95
G06	Maker: Jianshan -----	96
G07	Kemeng Robot -----	96
G08	Maker: Yu Hongfeng -----	97
G09	TechxArtisan Zhenjiang Technology Creative Studio -----	98
G10	Southwest Jiaotong University Team "Zao Yi Ge" -----	99
G11	Keyue Creation Studio-----	100
G12	Maker: Zhong Jiajun -----	101
G13	SZDIY -----	101
G14	HackerGadgets-----	102
G15	Maker: Li Changliang -----	103
G16	AbiDAO-----	104
G17	Maker: Gao Lei -----	105
G18	Shenzhen Polytechnic University -Maker Association Team -----	106
G19	Jia Chuang Team- Safty Riding-----	107
G20	Shenzhen Bay Area Power Robotics Club -----	108
G21	Xi He Sports Science and Technology Team-----	109
G22	Maker: Tang Xiaoli -----	110
G23	Champion Club for Playful Education -----	111
G24	Yi Zhu Team -----	112
G25	Maker: Li Yang -----	113
G26	Pet Language Design-----	113
G27	Xing Xiadao Team -----	114
G28	Electric Drum Team -----	114
G29	Jiangxin Gewu Team-----	115
G30	Radio Magazine -----	116
G31	Yi Xing Hang Technology -----	117

Clockwork Tech LLC

No. A011

Website clockworkpi.com

Contact biz@clockworkpi.com

Industry source development boards and hardware based on open source development boards

Introduction

ClockworkPi.com started as a small technology hobbyist group. Over the course of 5 years it has grown and evolved into a global technology community. Its products follow the FOSS philosophy of bringing digital products with an independent spirit to the global community. Currently ClockworkPi has released two development board motherboards: ClockworkPi 3.1 and ClockworkPi 3.14, and provides extensive support for ARM/RISC-V SoCs from Raspberry Pi 3/4, Arduino, Allwinner, Rockchip, and DIY products based on them. As well as the DIY product suite GameShell, DevTerm and uConsole.

Exhibits



GameShell

GameShell is a Linux-based retro handheld that was released on the world's largest crowdfunding site, Kickstarter.com, in 2017 and received the official "Our Favorite Project" title. During the crowdfunding period, GameShell was ranked Top 1 in the Tech category, maintained Top 3 attention and was covered by many famous tech media around the world. GameShell is still the best-selling product of ClockworkPi, and is sold in more than 60 countries and regions, even in war-torn areas. It brings fun and like-minded friends to users of all ages, from 10 to 60. It has also been introduced into hands-on Maker programs at several schools and organizations.



DevTerm

DevTerm is a Linux-based retro computer from ClockworkPi.com that supports the Raspberry Pi 3/4 computing module. It also supports a RISC-V 64 chip, making it the world's first RISC-V architecture portable computer. Immediately gaining traction in the enthusiast community and coverage in the world's leading technology media, including RISC-V international, DevTerm supports an ultra-wide screen resolution in the A5 size, a full keyboard and trackball, and even includes a thermal printing module. Its portability and openness have also gained the attention of the writer community as an authoring tool for immersive writing.



uConsole

uConsole is a Linux-based portable terminal with a full keyboard from ClockworkPi.com. It supports Raspberry Pi 4 computing module, Rockchip 3399 and a RISC-V 64 chip, and for the first time provides a 4G/LTE communication module, which makes it extremely network-connected. Structurally, uConsole is made of magnesium-aluminum alloy, which provides excellent portability and ruggedness. Based on these features, it has gained enthusiastic support from retro gamers, the open source community, as well as the attention of the SDR/HAM community as the best SDR Tactical Terminal on the market. uConsole is also an excellent solution for field computers in industrial scenarios and has gained the attention of the industrial community.

Website 52pi.com

Contact kd@52pi.com

Industry Open Source Hardware Product Service Provider

Introduction

52Pi was founded in 2013, headquartered in Shanghai. It is an open source hardware service provider focusing on Raspberry Pi.

Exhibits

Project 1:

Raspberry Pi 5 Peripheral accessories: heat sinks, cases, expansion boards and starter kits.



Project 2:

DeskPi Super6C, a clustered server based on the Raspberry Pi CM4.



Project 3:

DeskPi MiniCube is a mini computer based on the Raspberry Pi CM4.

Website BIGTREE-TECH.COM

Contact 18664985240

Industry 3D Printer Motherboards and Accessories

Introduction

Founded in 2015 and headquartered in Shenzhen, Guangdong Province, BIGTREE TECH is a high-tech enterprise specializing in the research, development, production and sales of 3D printer components. BIGTREE TECH products have been sold in more than 100 countries/regions around the world, providing a full range of 3D printing equipment and solutions for global creators.

Exhibits



Project 1: Manta M8P V2.0

Adopting 550MHz STM32H723ZET6 high-performance MCU, 8 stepper motor drivers on board, and supporting up to 60V, it is a high-performance and high-voltage 8-axis Klipper 3D printer motherboard. Using the same miniature BTB high-speed connector as the Raspberry Pi CM4, it is easy to connect to the Raspberry Pi CM4 core board as the host computer. Simplifies 3D printer wiring and configuration.



Project 2: Pad7

The PAD 7 is a 7-inch touchable panel with replaceable core board. It has built-in dual speakers, supports WIFI and Ethernet connections, and has 3*USB-A, 1*USB-C, SPI and CAN interfaces on board. Equipped with Raspberry Pi CM4 and other core boards, it can connect and control multiple 3D printers at the same time. It can also be used in Linux computers, smart home hubs and other scenarios.



Project 3: Voron 2.4

Founded in 2015 by Apple engineer Maksim Zolin, the Voron project is dedicated to delivering an efficient, quiet, and powerful open source solution for 3D printing, with performance that compares favorably to commercial-grade printers, and has been unanimously endorsed by the Voron team for its superior product performance and comprehensive security measures.

BIGTREE TECH was recognized by the Voron project team for its outstanding product performance and comprehensive security measures, and was the first motherboard manufacturer to assemble the Voron.

In addition, BIGTREE TECH has developed a series of 3D printer accessories for Voron, including the Manta series of all-in-one boards, the EBB SB CAN tooling boards, and the TMC2240 motor drive. The outstanding performance of these accessories makes the Voron run faster, more stable and quieter, which is widely loved by 3D printing DIY enthusiasts.

The Voron 2.4 on display, featuring a motherboard and motor drive designed and manufactured by BIGTREE TECH, will achieve a maximum print speed of 600mm/s and a maximum acceleration of 8000mm/s².

Website www.loborobot.com

Contact 13975851837

Industry Open source hardware and teaching equipment

Introduction

Hunan MAKEROBO Intelligent Technology Co., Ltd (abbreviation: MAKEROBO) is a programming education intelligent equipment and AI edge computing equipment production and service operation enterprise based on electronic information, and software technology, etc., set the product research and development, production, sales, and technical services as a whole for the various colleges and universities and vocational colleges and universities in the field of electronic information, automation, programming training institutes, industrial enterprises, scientific research institutions and other fields to provide products, services and integrated solutions! Provide product services and integrated solutions! Related products mainly include Raspberry PI series, NVIDIA Jetson series, including science and education equipment thousands of products. The products are sold at home and abroad, covering elementary school, secondary schools, universities, training institutions, vocational colleges and universities.

Exhibits

Based on the CreatePi Raspberry Pi Experiment Board Kit

we are showcasing the "CreatePi" product (CreatePi Raspberry Pi Learning Kit), which is a full-fledged experiment board for the Raspberry Pi. CreatePi boards are specifically tailored for those who are people who are passionate about STEM education, creativity, computer science, robotics, teaching others, or just out of curiosity!

The CreatePi Raspberry Pi Learning Kit kit from the CreatePi brand is designed for Raspberry Pi enthusiasts to learn python programming and sensor applications, Scratch programming, Minecraft Python programming, and embedded learning. In this tutorial, we will introduce the basics such as embedded programming, including what is Raspberry Pi, how to install and use it, Python programming syntax, Scratch 3.0 graphical programming, sensor module experimental projects, etc. These modules will be applied in some easy-to-understand experimental projects and many complex and interesting experimental projects.

Creality 3D

No. A02

Website <https://www.creality.cn/>

Contact 13049853782

Industry 3D Printing Technology

Introduction

Shenzhen Creality 3D CO.,Ltd is a leading brand of consumer 3D printers in the world, a national specialized, special and new "small giant" enterprise, and a national high-tech enterprise. Since its founding in 2014, the company has been committed to promoting the innovation, application and popularization of global 3D printing technology by upholding the spirit of "3D printing industry evangelist".

Centering on the strategic layout of "one body and two wings", Creative 3D has a comprehensive product coverage of 3D printers, 3D scanners, laser engraving machines, accessories, consumables, etc., and builds a perfect 3D printing ecosystem and the Creative Cloud integrated 3D printing platform, which has two international brands, Creality and Ender, as well as other products such as HALOT and Sermoon. At present, the company has two international brands, Creality and Ender, as well as other innovative brands such as HALOT and Sermoon, which are widely used in the fields of personal, family, education, and manufacturing, and are highly recognized by users and partners around the world. The company's products have been exported to more than 100 countries and regions, and ranked the top of the global 3D printer sales list.

The company has a complete system of research, production and marketing, and cooperated with many colleges and universities to establish production, learning and research bases, with more than 500 core authorized patents.

Exhibits



1. 3D Printing Equipment Display Experience

K1 Series High-Speed 3D Printer

600mm/s high-speed printing, super-sensitive AI LIDAR, intelligent AI camera, intelligent control Cluster Printing



HALOT-MAGE PRO Light Curing High Speed 3D Printer

A New Era of High-Speed Printing: 170mm/h Ultra-High Speed, 8K Ultra-HD Resolution, Intelligent Air Purification, Intelligent Recycling Feeder



2. the Creative Cloud APP interactive display experience



3. Creativity Eco Showcase

Website <https://bambulab.cn>

Contact contact@bambulab.com

Industry 3D Printing Technology

Introduction

Founded in November 2020, Bambu Lab is one of the world's leading 3D printing technology companies, headquartered in Shenzhen, China, with R&D centers in Shenzhen and Shanghai, and an office in Austin, USA. From the very beginning, Top Bamboo has had a globalization gene, bringing together partners from all over the world, with users in more than 60 countries and regions around the world. Users are able to break through the limitations of color and material in the printing process, elevating creativity to a whole new level. Top Bamboo Technology was founded by a group of 3D printer enthusiasts with a deep R&D background. The team has experts in the fields of mechanical/mechanical design, motion control, machine vision, artificial intelligence, embedded software, and cloud computing, etc. They have made a number of world-impacting products in their respective fields of specialization, and they have the experience of research and development, mass production, and global promotion.

Exhibits



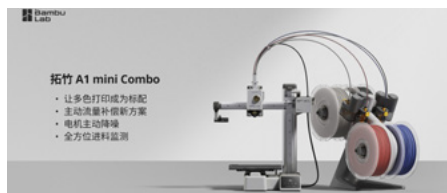
Bambu X1-Carbon



Bambu X1E



Bambu PI Series



Bambu A1 mini

Software and Ecology

3D printing cannot be separated from the modeling ecosystem, and Bambu Lab is actively exploring the world of modeling, and MakerWorld is one step in our exploration. MakerWorld is one step in our exploration. The idea is to unite the strengths of outstanding creators, slicing experts, consumables suppliers, and consumers. This collaboration ensures that not only models, but also slicing techniques and the joy of creation are shared within the community. We strive to provide a supportive, open and inclusive community that provides an exceptional experience for everyone involved.

Debut Exhibit

MakerWorld

Website <https://www.szpt.edu.cn/xxgk/xxjj.htm>

Contact 18675512918

Industry Pet supplies, drone equipment, handicapped living, etc.

Introduction

Shenzhen Polytechnic University is a public undergraduate school, whose predecessor was Shenzhen Institute of Vocational Technology (SZIVT) founded in 1993, and in June 2023, the Ministry of Education approved the establishment of SZUVT based on SZIVT integrating resources. The College of Innovation and Entrepreneurship of Shenzhen Vocational and Technical University (hereinafter referred to as "Innovation and Entrepreneurship" for short) consists of four sections, including the "Dual Creation" Education and Research Office, the Creativity Center, and the Center for Entrepreneurship Incubation and Competition. It consists of four sections, including "Double Creation" Education Teaching and Research Office, Creativity Center, Business Incubation and Competition Center, and Comprehensive Management Office, which are responsible for the overall coordination and organization and management of "Double Creation" education in the whole university. The college has a team of "dual-creation" instructors consisting of experts from both inside and outside the college, famous entrepreneurs, successful entrepreneurs and outstanding alumni, and has built a creative entrepreneurship park, two maker spaces and seven cross-border learning centers such as Big Data and Artificial Intelligence.

Exhibits



Project 1: A specialty camera, home electric chain saw and a series of smart dog trainers

Developed by the company founded by Zhou Yongkai, a 2017 graduate of the College of Mechanical and Electrical Engineering. Founded in 2019, the company's main business is cross-border e-commerce, the company's revenue in 2022 has exceeded 500 million RMB, the dog trainer series products are popular in both domestic and international markets, especially in North America, and have been ranked as the No. 1 best seller of the segmented category for three consecutive years on the Amazon platform.



Project 2: High Resolution Hunting Camera

Waterproof and dustproof, it can provide high-quality images in harsh environments such as night, rainforest or desert.



Project 3: Head Mounted Mouse

It connects to phones, computers and smart TVs via Bluetooth, and is equipped with a variety of clicking parts such as biting, stepping, and jaw clenching, which can help physically challenged people better control their phones, computers, and TVs.



Project 4: UAV Battery Health Status Diagnostic Equipment

The product can accurately detect the health status and endurance time of commonly used drone batteries, effectively solving pain points such as sudden failure and blasting when the drone performs tasks, and has been put into commercial use by enterprises such as the South China Power Grid in bulk purchase.

Website www.raspberrypi.com

Contact sales@raspberrypi.com

Industry Computer hardware manufacturing field

Introduction

Raspberry Pi develops a range of low-cost, high-performance single board computers (SBCs), computing modules and microcontrollers in the UK to enable fun, useful creations in an affordable way for a wide range of users. Since the project's inception, Raspberry Pi has been driven by the need to make technology universally accessible and lower the barrier to using tech tools. Today, Raspberry Pi technology is used in a wide variety of applications including interactive museum exhibits, major corporations, schools, national postal sorting centers and government call centers. The impact of Raspberry Pi technology is ubiquitous, bringing convenience and utility to users, and energizing development in a wide range of industries.

Exhibits



Raspberry Pi 5

High-performance miniature single board computers. The new generation of Raspberry Pi is 2-3 times faster than its predecessor and redefines the Raspberry Pi experience by utilizing Raspberry Pi's internally designed silicon for optimal performance. The Raspberry Pi 5 development computer is equipped with a 2.4GHz 64-bit quad-core Arm processor and 800MHz VideoCore VII GPU for high-quality graphics. It offers advanced camera support, multiple connectivity options and enhanced peripheral capabilities for multimedia, gaming and industrial tasks.



Raspberry Pi 4

It is a miniature desktop computer that is also a smart brain, smart home hub, media center, networked AI core, factory controller, and other multi-purpose devices. Compared to its predecessor, the Raspberry Pi Gen 3 B+, it offers breakthrough increases in processor speed, multimedia performance, memory and connectivity.



Raspberry Pico

The Raspberry Pi Pico series is a range of miniature, fast and versatile development boards utilizing the RP2040, the flagship microcontroller chip designed in the UK by Raspberry Pi.



Raspberry Pi Zero 2 W

The Raspberry Pi Zero 2 W uses the RP3A0, a custom system-in-package chip designed by Raspberry Pi in the U.K. The Zero 2 W is powered by a 1GHz quad-core, 64-bit ARM Cortex-A53 processor and 512MB of SDRAM memory, which allows the Zero 2 to process up to five times faster than the Raspberry Pi Zero.



Raspberry Pi 400

The Raspberry Pi 400 is a personal computer built into a compact keyboard. It features a quad-core 64-bit processor, 4GB of RAM, wireless networking, dual display outputs, and a 40-pin GPIO pin expansion interface.

Debut Exhibit

Raspberry Pi 5 and related accessories

Website www.seedstudio.com

Contact 0755-86095676

Industry Intelligent Manufacturing, Intelligent Agriculture, Intelligent Energy, Intelligent City, etc., Open Source Software and Hardware and Creative Education, etc.

Introduction

Seed Studio is your IoT hardware partner for digital transformation. Since 2009, we have been working closely with global technology ecosystems to provide hardware modules, devices, solutions, and other relevant services to digital innovators. We integrate the latest technologies into thousands of open-source hardware modules so that millions of developers, makers, and innovators from different backgrounds can innovate interdependently. With our professional and industrial expertise in smart sensing, networking, edge computing, and embedded machine learning, our ready-to-deploy products are increasingly accelerating myriads of emerging digital solutions in the real world. Seed Studio has been well recognized by both technology and mainstream media, thanks to the professionalism and quality of our products and services for vertical industries, in particular, smart energy, digital field operations, precision agriculture, and scientific research, to mention a few.

Exhibits



Mission Pack

A comprehensive out-of-the-box IoT toolkit designed to provide a one-stop digital transformation experience.



SenseCAP ONE V2

SenseCAP ONE is a series of industrial grade weather sensors that measure localized weather changes.



reComputer J4011

Edge AI device with 100 TOPS of arithmetic power based on the NVIDIA Jetson Orin NX module.

reComputer J4011 Industrial version

Edge AI Devices with 70 TOPS of Arithmetic Power Operating in Harsh Environments



reServer J3011 Industrial version

Edge Inference Server for intelligent video analytics that can upgrade legacy cameras and unlock AI analytics.



reTerminal DM

10.1-inch IP65 touch panel device with integrated PC, HMI, PLC and IIoT gateway functionality, Node-RED and Raspberry Pi ecosystem support, camera and PoE modules for distributed device management across multiple industries.



reTerminal

Modular 5-inch development board based on the Raspberry Pi CM4 supports personalized IoT and AI projects and industrial monitoring.



reRouter



A small soft router with customized OpenWRT system and Raspberry Pi CM4 with dual Gigabit Ethernet ports and dual USB 3.0 ports.

EdgeBox-RPI-200

A Raspberry Pi CM4-based, highly scalable and ruggedized edge computing controller that supports multi-industry applications thanks to its rich IO and communication capabilities.



XIAO ESP32S3 Sense

The device with the dual-core ESP-32S3 chip supports Wi-Fi and BLE for embedded machine learning applications, and features a camera sensor and digital microphone.



Millimeter-wave Human Detection Sensor Kit

Grove - SEN54 All-in-One

Environmental Sensor

Grove - Carbon Dioxide & Temperature Humidity Sensor

Grove - Smart Air Quality Sensor

Grove - Smart Infrared Gesture Sensor



Seed Studio Fusion Agile manufacturing and hardware customization services

Seed Studio Fusion is the world's one-stop online platform for PCB manufacturing, assembly and hardware customization to meet your every need:

- ODM- Customized solutions for open source products
- PCB/PCBA- Prototyping
- OEM- Manufacturing
- Co-create- Co-creation programs that turn ideas into profits



Website www.nvidia.cn

Contact /

Industry Full-stack solution provider for AI platforms

Introduction

NVIDIA (NASDAQ: NVDA) has been a pioneer in accelerated computing since its founding in 1993. NVIDIA's 1999 invention of the GPU drove the growth of the PC gaming market, redefined modern computer graphics, ushered in the era of modern AI, and is driving the digitization of industry across markets. NVIDIA is now a full-stack compute company whose data center-scale products are reshaping entire industries.

Exhibits



Jetson AGX Orin 64GB Developer Kit

Get started with Jetson AGX Orin modules easily with the NVIDIA Jetson AGX Orin 64GB Developer's Kit. With a small form factor, many interfaces, and up to 275 TOPS of AI performance, it is ideal for advanced prototyping of AI robots and other autonomous machines.

Jetson Orin Nano Developer Kit

The NVIDIA Jetson Orin Nano Developer Kit sets a new standard for building entry-level AI-enabled robots, drones and smart cameras. It also simplifies the process of using the Jetson Orin Nano family of modules. With a small form factor, many interfaces, and up to 40 TOPS of AI performance, this developer kit is ideal for turning your AI concepts into reality. It delivers up to 80 times the performance compared to the Jetson Nano™ and can run all modern AI models, including transformer models and more advanced robotics models.

Jetson Nano Developer Kit

NVIDIA Jetson Nano The Developer's Kit is small, powerful and low-cost, delivering outstanding computational performance for running AI workloads. Developers, learners and manufacturers can run AI frameworks and models to enable applications such as image classification, target detection, segmentation and speech processing.

VVTBot Robot (LITUOTECH)

Driven by the latest generation of NVIDIA Jetson Orin series modules, it supports up to 100 TOPS AI algorithms and integrates components such as LIDAR, multi-type cameras, 5G, WIFI, microphones, speakers, and touch display, which provides good support for applications such as voice interaction, AI vision, localization and navigation. With complete supporting equipment and courses, this robot is an ideal platform for learning NVIDIA Isaac ROS GEM, and can provide customized services and technical support for enterprise-level applications.

Isaac Sim Demo

NVIDIA Isaac Sim, powered by Omniverse, is a scalable robotics simulation application and synthetic data generation tool that delivers realistic, physically property-accurate virtual environments for developing, testing and managing AI-based robots.

EVS Event Camera(SENSING)

The EVS event camera, jointly developed by Moriyun, PROPHESSEE and Sony, is a visual sensor with a new imaging technology. The camera is based on the principle of event triggering, only senses moving objects, and meets the brightness change amplitude of the pixel data, with extremely fast response speed, reduce invalid information, reduce algorithms and power consumption, high dynamic range and other advantages, can detect the dynamics of the object in the light and dark change, fast-moving environments and tracking, and can effectively solve the needs of the camera high dynamics, low latency, and protection of privacy.



ABeam Consulting

No. A10

Website www.abeam.com

Contact +86-755-8215-7209

Industry Manufacturing, Aerospace, Automotive, Chemical, Finance, Retail, Transportation, Communications, High Tech, PR, etc.

Introduction



Founded in 1981 and headquartered in Tokyo, Japan, ABeam Consulting Group has been developing for more than 40 years and has set up service centers in China, Korea, Thailand, Singapore, the United Kingdom, Germany, the United States and other countries and regions around the world. As of April 2023, ABeam Consulting Group has more than 7,000 employees around the world and serves more than 700 clients globally. Our services cover manufacturing, aviation, automotive, chemicals, finance, retail, transportation, communications, high-tech, and public relations. As a global consulting firm with its origins in Asia, ABeam Consulting leverages its deep experience in industry management consulting around the world to provide timely consulting services to help clients expand their businesses globally. Based on industry-specific issues and market needs, and taking into account the cultures and business practices of different countries and regions, we are committed to providing our clients with customized services in a wide range of areas, from corporate strategy to business reform, and from IT implementation to system operation and maintenance. Since setting up a base in Shanghai in 2004, the ABeam Consulting Group has been able to stand out from the fierce competition in the market and has experienced rapid growth. Currently, ABeam Consulting Group has set up branches in Shanghai, Beijing, Shenzhen, Xi'an, Dalian, Hong Kong and Taipei. As of July 2023, ABeam Consulting Group has more than 1,100 employees in China. ABeam Consulting China has always been a pioneer in innovation. Since the establishment of our startup division in 2017, we have been committed to in-depth research on China's innovation and technology trends, and actively building the ABeam China startup ecosystem by establishing close partnerships with outstanding startups in China. Not only do we provide customized innovation and technology services to established industry players in a variety of areas, from strategy to business transformation, and work with startups to drive open innovation for our clients, but we also conduct ongoing R&D activities in a variety of areas, including artificial intelligence, Internet of Things (IoT), virtual/augmented reality, and AIGC.

Innovation Need

We are looking for outstanding startups with a sense of co-creation with customers and a willingness to expand internationally in the technological direction of IoT, AI, big data analytics, and big language modeling, as well as in the business areas of new retail, smart manufacturing, and women's technology.

Website <https://www.icity.design/>

Contact 13428993623

Industry Urban development design services

Introduction



Vanke Urban Research Institute (VURI) is a think-tank urban development planning and consulting organization under the Vanke Group. We focus on how to build better cities, believing that "urban vision", "public interest" and "business sustainability" are the most critical tripartite balance in urban development. We look at urban development from a market perspective and seek longer-term urban development strategies; we look at inefficient assets and public experiences from a diverse perspective and work for better cities. Since its establishment in 2017, we have provided hundreds of urban planning and design services for more than 30 cities across China, covering the Yangtze River Delta region, the Pearl River Delta region, the central and western regions, coastal cities and national pilot cities. We start from the experience of the city, care about people's way of traveling and quality of life, and describe the beautiful imagination of the future city. In addition, we also care about the content operation of cities, utilizing our rich resources in project operation to plan urban cultural activities. Vanke Urban Research Institute joins hands with internationally renowned universities and research institutes in the industry to bring together cutting-edge ideas and professionals, integrate resources from all sides, and build the foundation of a smart city from the aspects of science and technology, data, and culture, emphasizing on technological innovation and energy utilization, caring about people's experience in the city, and describing the beautiful imagination of the future city.

Innovation Need

1. Future City Scene

Future City Scene is a micro-renewal project based on the space of the old city, which expects to combine the physical scene with technology and intelligent technology or products to create a smarter, more efficient and futuristic city scene or provide related innovative services.

2. Low-carbon technology

In the context of dual-carbon, we are looking for low-carbon/environmentally friendly equipment or low-carbon/innovative innovative technologies that can be applied in urban public spaces, offices, residences and other scenarios.

Website <https://www.airbus.com/en/innovation/innovation-ecosystem/airbus-china-innovation-centre>

Industry Aerospace industry

Contact yiwen.mai@airbus.com

Introduction



In November 2017, Airbus announced that it had chosen Shenzhen, known as "China's Silicon Valley", as the location for the Airbus China Innovation Center. The mission of the Airbus China Innovation Center, the first Airbus Innovation Center in Asia, is to leverage local strengths, including innovative talent, partners and ecosystems, and combine them with Airbus' expertise in aerospace to identify breakthrough technologies, business models and new growth opportunities. The Airbus China Innovation Center is currently located in the following

Innovation Need

Smart Aircraft Cabin

Innovative AI and IoT applications have penetrated into every aspect of our daily lives, and as connectivity and digitization deepen, the application scenarios of aircraft cabins are developing in full swing, which will bring brand new opportunities and challenges to airlines, passengers, component suppliers, and aircraft manufacturers.

Smart Aircraft Factory

Robotics, AI and other applications are increasingly being used in the smart manufacturing industry, and the manufacturing as well as assembly of airplanes are embracing the full range of enhancements brought about by smart manufacturing. Your innovative ideas or your joining will have the chance to soar into the blue sky from our smart factory.

Website <https://tnc.org.cn/>

Contact 18682018832

Industry Public welfare field

Introduction



TNC(the Nature Conservancy) founded in 1951 and headquartered in Arlington, Virginia, USA, the Nature Conservancy (TNC) is one of the largest international nonprofit conservation organizations working to protect ecologically important lands and waters around the world, safeguard the natural environment, and enhance human well-being. TNC develops science-based, innovative and practical solutions to the planet's greatest challenges. With a global perspective, we address climate change, protect land, rivers and oceans, and help advance sustainable urban development. tnc currently works in more than 70 countries and territories, and is the steward of more than 1,600 protected areas covering more than 500,000 square kilometers, 8,000 kilometers of rivers, and more than 100 marine ecoregions around the globe. Founded in 1951 and headquartered in Arlington, Virginia, USA, The Nature Conservancy is one of the largest nonprofit environmental conservation organizations in the world, and is dedicated to protecting ecologically important lands and waters around the globe, safeguarding the natural environment, and enhancing human well-being. TNC develops science-based, innovative and practical solutions to the planet's greatest challenges. With a global perspective, we address climate change, protect land, rivers and oceans, and help advance sustainable urban development. tnc currently works in more than 70 countries and territories, and is the steward of more than 1,600 protected areas covering more than 500,000 square kilometers, 8,000 kilometers of rivers, and more than 100 marine ecoregions around the globe.

Innovation Need

Utilizing nature to mitigate climate impacts is critical in a time of growing climate emergency. In the Great Bay region, restoring mangroves and oyster reefs is the most effective natural climate solution. To identify suitable sites for mangrove restoration, we need remote sensing and artificial intelligence techniques to identify suitable habitats. Some parameters such as high tide level, sediment type, and hydrology need to be considered in the search criteria.

Website www.inboyu.comContact 9652915@qq.com

Industry Real Estate Industry

Introduction



Bo Yu is the long term rental apartment brand of Vanke Group. By practicing Vanke's group strategy of "urban and rural construction and life service provider" and adhering to the brand concept of "letting drifting apartments see the temperature", it provides "warm" comprehensive rental communities for new citizens drifting in the city. "We provide new citizens drifting in the city with a comprehensive rental community. The company has created a product line of youth apartments, family apartments and serviced apartments, which can provide rental scenarios for customers at different stages of their lives. Since the launch of its first rental project, Guangzhou Wanhui House, in 2007, the company has been deeply engaged in the rental housing industry for 16 years, with more than 400 projects opened in 34 cities, 210,000 housing units in operation, and a total of 750,000 tenants served. At present, the company is the largest in terms of scale and market share of centralized apartments in China, and leads the industry in terms of operational efficiency.

Innovation Need

Intelligent Operation

Based on advanced technologies such as IoT, big data, AI, and the combination of housing rental operation scenarios, it further improves operation efficiency, reduces operation and management costs, and provides customers with a safer, more convenient, more comfortable and more considerate living experience.

RobotAnno (ShenZhen) Co., Ltd.

No. B01-B02

Website www.robotanno.com

Contact 13380796250

Industry Education, commerce, catering, light industry, etc.

Introduction

Founded in April 2017, RobotAnno (ShenZhen) Co., Ltd. is a national high-tech enterprise focusing on the research and development, production, sales and service of desktop-level robotic arms and their commercial integrated application solutions. Driven by artificial intelligence technology, with "easy-to-operate, high-performance, diversified" desktop robotic arms as the carrier, through integrated solutions, to help customers solve the manpower shortage, rising labor costs and other constraints on the future development of the enterprise's bottlenecks. Its intelligent robotic arms can simultaneously meet the needs of multiple industries such as teaching, commerce and light industry.

Exhibits



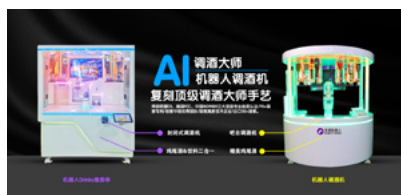
Project 1: ROBOT ANNO Coffee Maker

A robotic coffee maker is an intelligent coffee making device that combines robotics and coffee making expertise. This coffee maker can usually be operated via a touchscreen or mobile app with several preset coffee types and customized setting options. It can make different coffees such as espresso, americano, latte, etc. based on your flavor preferences and caffeine needs. In addition, the robotic coffee maker also features automatic bean grinding, auto-cleaning and auto shut-off.



Project 2: AI Intelligent Robot Bartender

The robot bartender adopts advanced artificial intelligence technology with intelligent recognition function and automated bartending program. Select your favorite drink and flavor through the touch screen interface, press the button and the robot bartender will automatically mix the perfect drink. The robot bartender has an extensive built-in liquor library supporting 12 liquors, a large number of built-in bartending recipes and drink pairing principles, which accurately recognizes your choice of liquor and calculates the best recipe based on a unique algorithm. The robot bartender also has an auto-cleaning function. With a preset program, it can automatically clean the internal pipes and storage tank.



Project 3: J601-A Educational Robotic Arm

It is a consumer grade desktop educational robotic arm with light weight, fast running speed, high repetitive positioning accuracy and high cost performance. Adopting engineering plastics as the material of robot body, it has a compact shape and small volume, and is capable of completing various tasks such as loading and unloading, sorting and assembling with high speed and high precision. It is able to work flexibly in a narrow space, and its lightweight and portable features give it great flexibility in arranging the overall layout of the production line. The multi-axis linkage interpolation control algorithm ensures that the robot has high-precision control. The product supports a variety of intelligent interactive control methods, such as PC and teach pendant. The precision reaches 0.5mm, with easy programming software and rich multifunctional end accessories.



Website www.mgspace.net

Contact 18680358066

Industry Science education

Introduction

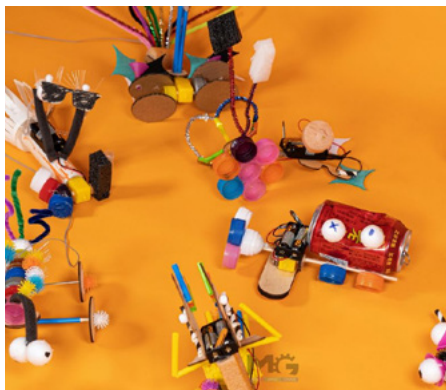
Focusing on the field of science and creativity education, MG has opened MG Space, which is dedicated to helping China's new engineering education through product research and development, curriculum design, space creation, teacher training, etc., and to providing real and open science and creativity education space for 4-16 year olds, and to supporting more science and creativity educators.

Exhibits



Project 1: Eco-Sustainable - Old Robot Makeover

Basic electronic components and environmentally friendly recycled materials are provided on site for participants to create simple robots.



Project 2: Mini Smart Factory

Equipment such as 3D printers and hot stamping machines were provided on site to allow participants to experience the design and production process.

Website www.acebott.com

Contact 13378429333

Industry STEM Creative Education

Introduction

ACEBOTT is a STEM hardware education brand, mainly focusing on electronic components and programming to develop different learning kits, to help children better learn electronic components and programming, to open the door for them to become future creators. Our mission is to "empower children, create the future".

Exhibits



Project 1: Learning the ARDUINO Starter Kit

Mainly for children to learn

- Gain hands-on experience building circuits and projects
- Learn electronics basics, circuits and Arduino programming fundamentals
- Writing code to control components and devices in the Arduino IDE
- Build problem solving and critical thinking skills by completing projects

Project 2: ESP32 Kits

Mainly for children to learn

- Embedded Programming of the ESP32 with the Arduino IDE
- WiFi network - connects the device to the Internet
- Bluetooth communication Cloud Integration - MQTT AWS IoT
- Basic TensorFlow Lite Machine Learning on ESP32
- OLED Display, SD Card and Other Peripherals
- Wireless protocols like NRF24L01
- SIM800L cellular communication
- Computer Vision with ESP32-CAM
- Sensor interfaces - temperature, motion, gas, etc.

Project 3: ESP Smart Home Learning Kits

- WiFi networks and connecting devices to the Internet
- Embedded Programming of the ESP32 with the Arduino IDE
- Remote control and monitoring with the Blynk app
- Voice control integration with Amazon Alexa and Google Home
- Relay control and switching of high voltage equipment
- Home Automation and IoT Projects with the ESP32
- Sensor interfaces - temperature, humidity, motion, gas, etc.
- Integrating the ESP32 with Solenoids, Pumps and Motors
- Power Management and Battery Charging Solutions
- Design PCB boards for electronic projects



Debut Exhibit

ESP Smart Home Study Kit

Website www.elegoo.com.cn

Contact 15989107805

Industry 3D Printer

Introduction

Founded in July 2015, Shenzhen Elegoo Technology Co., Ltd. is a high-tech enterprise focusing on the research, development, production and sales of 3D printers and stem kits. The founders are a young team from Jinan University, Central South University and other famous universities in China. Currently, the company has sold millions of products globally to more than 70 countries and regions, and the desktop 3D printers developed by ELEGOO have the advantages of high printing precision, high speed and low cost, which have a broad application prospect.

Exhibits



Project 1: Neptune 4 Pro Neptune FDM 3D Printer

It is the second generation of ELEGOO's newly launched high-configuration mugger model, which adopts the Klipper high-speed silent motherboard, equipped with a 64-bit 1.5G main frequency 4-core high-performance processor and hurricane cooling system, upgraded all-metal dual-axis guide, support for 500mm/s High-speed printing and LAN networking. There are also Neptune 4, Neptune 4 Plus and Neptune 4 Max models available in different configurations and print sizes.



Project 2: Saturn 3 Ultra Saturn Light-curing 3D Printer

Saturn 3 Ultra Saturnis equipped with a 10-inch ultra-clear 12K monochrome LCD screen with a resolution of up to 11520×5120 and a pixel size of only 19*24 microns, making it the most accurate desktop-grade light-curing 3D printer available. With 218.88×122.88×260mm³ print space, the new linux system, the fastest print speed of 150mm/h, and support for wireless WiFi transmission, it brings users a new light-curing printing experience.

Website www.OpenEmbed.com

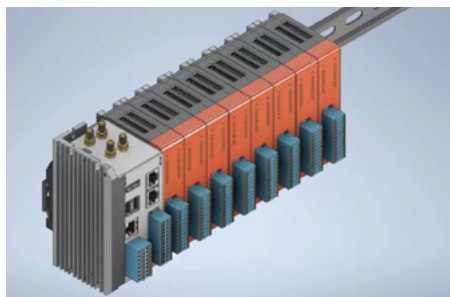
Contact 18665387300

Industry IoT

Introduction

OpenEmbed was founded in 2013, after nearly 10 years of technical accumulation by team members, mainly involved in the field of Raspberry pi, Arduino and Jetson industrial applications and commercial deployment of customized, based on the Raspberry Pi development of a series of industrial PLC controllers, industrial IoT gateways, industrial edge controllers, and so on. Most of their customers are from Europe and North America, the semi-customized design concept is suitable for small batch, multi-level small and medium-sized customer needs, not only reduces the time-to-market, but also has the advantages of controllable process, reduce the risk of development, and so on, which is very popular with overseas customers.

Exhibits



Project 1: Medium-sized plc system based on raspberry pi

Medium-sized plc system based on raspberry pi bringing MORE to automation systems, modular, open, reliable and edge.



Project 2: EdgeLogix

Another Raspberry Pi CM4 related product for the 2021, targeting the PLC controller market.

KittenBot

No. B07

Website <https://www.kittenbot.cn/>

Contact 13428651081

Industry Science Education

Introduction

Shenzhen KittenBot Technology Co., Ltd, is a company dedicated to science and innovation education, aiming to help teaching staff and students to better carry out classroom teaching and master information technology knowledge. We have a professional technology development and teaching and research team, to provide stable and good programming products as the core, and constantly explore new technologies and teaching methods, to make substantial contributions to the development of the next generation of science and technology. We also cooperate with schools and educational institutions around the world, and actively co-organize various programming education activities and competitions to encourage students to participate in programmed learning and innovative practices. We also have several cases of cooperation with top companies in the programming industry, which reinforces our focus on product quality, user experience, and win-win cooperation.

Exhibits



Project 1: KittenBot Future Home

Based on LEGO small particles, the project is designed on the basis of actual smart life scenarios, integrating the thinking of future urban living. In the project, you can experience the PFV doorbell, voice recognition and speech synthesis, and control home appliances and query information by voice.



Project 2: Digital weather station

Based on Lego technology components, it is designed with IOT as the core, taking into account artificial intelligence and data analysis. Collect elements such as wind speed, wind direction, temperature and humidity, and upload them to the IOT server. Combined with Kittenblock data analysis plug-in, it realizes remote detection and analysis.



Project 3: IT Solutions

Designed to meet the content requirements of the IT curriculum standards, it covers the content of the three major sections of data and coding, algorithms around, process and control, as well as cross-disciplinary cases, providing a complete solution for teaching the new IT curriculum standards for teachers and students in China.

Website www.petoi.com

Contact 15218705753

Industry Education

Introduction

Petoi's founders started the OpenCat prototype project solo in 2016, and were the first in the world to demonstrate the viability of consumer-grade servos for use as joints in high-performance quadruped robots. In subsequent iterations over the years, the company achieved productization and mass production shipments. Its products feature a delicate collocated skeleton, a unique vibration damping system, and layered control logic, which greatly reduces the technological threshold and mass production cost of realizing quadrupedal walking, creates a whole new category of consumer-grade robots, validates the market demand for quadrupedal walking robots in the field of science and education, and opens up application scenarios on the entertainment side. Petoi Inc. was founded in 2017 in the U.S. and in 2018 Petoi was founded in the United States in 2017, and successfully crowdfunded Nybble in 2018 and continued to ship. 2019, Petoi was founded in Shenzhen, and after one year of research and development in the Dongguan factory, the company successfully crowdfunded Bittle in 2020 and mass-produced and delivered.

Exhibits



Petoi OpenCat Desktop quadruped robot

Petoi OpenCat quadrupedal robots Nybble and Bittle have 11 and 9 joints respectively, which can realize high-performance quadrupedal gait and vivid bionic behavior. Based on the underlying motion platform, it also supports multiple user interfaces, such as remote control, mobile apps, desktop apps, and voice control, with complete and detailed manuals and courses to minimize the threshold of use and learning, and open-source code to support multi-level in-depth development. Petoi's mission is to bring more interactivity and sense of life to robots, to bring futuristic robot pets from science fiction into reality, and to alleviate the loneliness of modern humans.

Website www.gadget-labs.com

Contact 0755-33941578

Industry Brands Going Abroad

Introduction

Founded in 2015, Gadget Labs is dedicated to helping customers discover the most valuable product positioning, and provide integrated service system of market testing, product video filming and production, visual design, media exposure, celebrity marketing, advertisement placement, and independent website operation, etc. We are the first one to realize data-driven marketing with multiple automation software. We have set up branches in Shenzhen, Nantong and the United States, and operate independently without any third party. Since our establishment 9 years ago, we have served 400+ successful crowdfunding projects on Kickstarter/Indiegogo, and helped our clients raise more than 160 million dollars.

Exhibits



Project 1: XGO-Rider

XGO-Rider is a desktop-level dual-wheeled Raspberry Pi based foot development platform, with built-in Raspberry Pi CM4 modules to realize AI edge computing applications, adopting 4.5KG.CM all-metal magnetically encoded bus serial servos as joints and FOC hub-integrated motors as wheels, which can realize omni-directional movement, gesture stabilization, multi-motion superposition, and image-voice interaction, and equipped with an internal IMU for internal algorithms and secondary development, supports cross-platform graphical, python programming and ROS programming.



Project 2: Titanium Tiger Robot Arm

This is an intelligent lightweight 6 degrees of freedom modular collaborative robot with modular joint design, which allows users to develop their own control system based on the provided application program interface; it has a dedicated programmable operator interface, which allows the robot to be remotely controlled and set up to observe the operation status; it is a small robotic arm, which is easy to carry around, and can be used to substitute for manual operation in confined spaces and hazardous areas.



Project 3: Melgeek Featured Mechanical Keyboards

Melgeek's three different series of mechanical keyboards all feature unique design styles, including colorful keycaps, personalized keyboard shells, etc.; they offer a wide range of keyboard layout options and customized configuration options, allowing users to choose different keycaps, switches, etc., to play unique and personalized keyboards according to their preferences.

Website <https://oshwhub.com/>

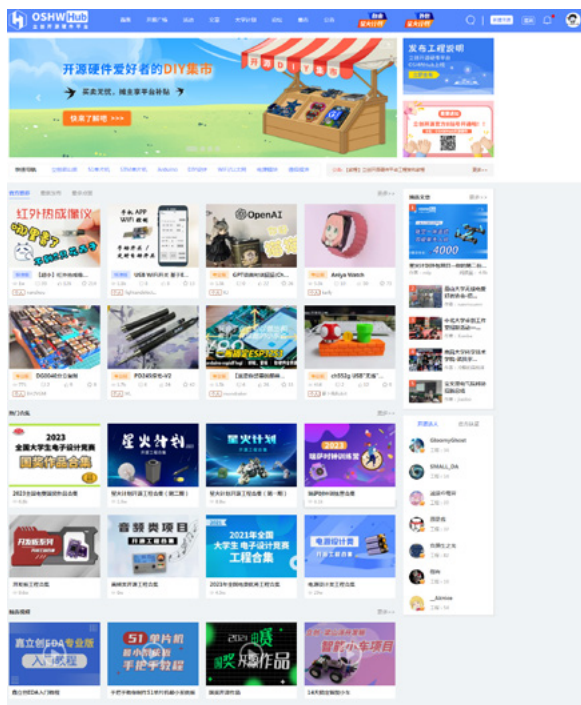
Contact 18565680117

Industry Electronics industry

Introduction

Shenzhen JLCCAM Technology Group Co., Ltd. was founded in 2006, is the industry's early realization of the digital transformation of one of the high-tech enterprises, focusing on PCB prototyping / small batch, SMT SMD, laser stencil and other fields, for the domestic and foreign industry enterprises, electronic engineers, scientific research institutions, to provide "good price, high quality, fast delivery" cost-effective services. We provide cost-effective services for domestic and overseas industrial enterprises, electronic engineers, and research institutions with "excellent price, high quality, and fast delivery". OSHWHub is a "electronic DIY creator sharing platform" derived from Garrison EDA. OSHWHub gathers a large number of high-quality open-source hardware projects. Relying on the domestic PCB design tool Jialitron EDA, OSHWHub can realize one-key opening of circuit design diagrams and experience the charm of open-source in a convenient and efficient way! The open source platform covers "Creator Training Camp", "Creator Competition", "Project / Article Sharing", "University Program" and "Open Source Community". "Open source community" and other functional modules, to meet the needs of different types of open source enthusiasts, is committed to take you to become a good hardware engineer!

Exhibits



LIChuang open source hardware platform user works

Link: <https://oshwhub.com/explore>

Website sanweihou.com

Contact 13530936537

Industry Manufacturing Industry

Introduction

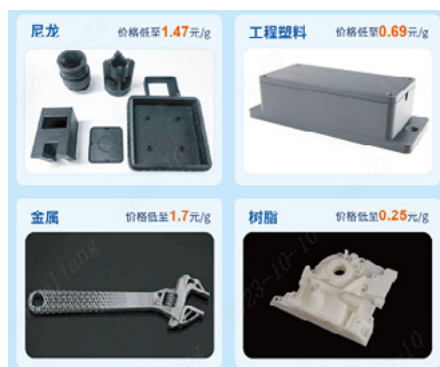


JLCCAM 3D 3D Printing Division Created in September 2020, "3D Printing" is a 3D printing brand registered by Shenzhen JLCCAM Technology Group Co., Ltd.

As one of the important business of Jialichuang machinery industry chain, it provides cost-effective and fast additive manufacturing services with the business model of digital manufacturing and online full-process operation. Printable materials

include resin, industrial plastics, nylon, metal; the main service industries are industrial design, medical, electronics, automotive, handicrafts, props, handicrafts, hardware accessories, sculpture and so on.

Exhibits

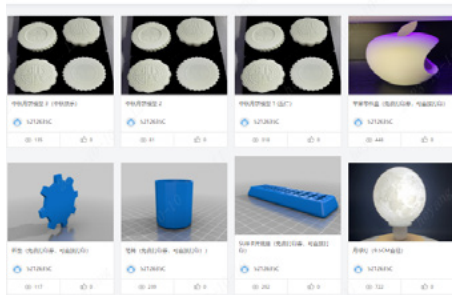


Platform Advantages

1. The page is easy to operate, support for online quotes, upload documents to get the price of printing, cost-effective, printing fees as low as 2 yuan!
2. The materials are printed on industrial-grade 3D printers with guaranteed quality.
3. The model library supports uploading by original creators, and original models can get sharing incentives, providing downloadable prints for newbies who can't model.

Price

Link: <https://www.sanweihou.com/swhorder/#/placeOrder>



Website <https://www.lilygo.cc/collections/all>

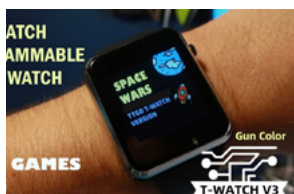
Contact 15994823428

Industry IoT, STEAM education

Introduction

LILYGO® is a company that integrates research and development, production and sales, and is committed to promoting the development of the Internet of Things industry." Committed to the development of the Internet of Things. Making Development Easier " is the product philosophy of LILYGO®. In the past few years, we have released a series of open source hardware products, from MCUs to IOT modules to STEM education kits, with the core idea of making programming easier and more fun. The core idea is to make programming easier and more fun, to bring ideas to life, and to share the fun with everyone.

Exhibits



Project 1: T-Watch S3

T-watch S3 is a programmable, wearable, (Wi-Fi/Bluetooth/LoRa/GPS) networking, UI interaction, AI voice interaction, all-in-one wearable device, and at the same time, the internal FPC interface is reserved for expandable functions, which is convenient for designing and adding function modules. Application Scenario: STEM, Smart Home Terminal, LORA Mesh, Industrial IoT Terminal



Project 2: T-Display S3

T-Display S3 is an upgraded version based on the T-Display base model, featuring a rectangular size screen and ESP32 basic combination, battery charging/discharging circuitry and low power consumption design, full IO port pinout, and adapted to support QWIIC function module interface, PC+ABS material optional case, which makes it convenient for the user to use as a stand-alone unit with a case or as a bare board embedded in a device.

Application Scenario: STEM, IoT Controller, Networked Interactive Embedded Module



Project 3:T-BEAM

T-Beam is a core IoT module with integrated main controller ESP32, LORA communication + GPS positioning, as well as PMU power management chip and 18650 battery holder on the back. T-Beam is suitable for a variety of application scenarios, and users only need to use the GPIO expansion interface on both sides.

Application Scenario: STEM, Industrial IoT core modules, asset location, smart agriculture, outdoor LoRa communication devices

Website	https://cn.abeam.com/cn/zh	Contact	+86-755-8215-7209
Industry	Manufacturing, Aerospace, Automotive, Chemical, Finance, Retail, Transportation, Communications, High Tech, PR, etc.		

Introduction

ABeam Systems Information Technology (Shenzhen) Co., LTD. is an important branch of ABeam Consulting in China. Since our founding in 2007, we have relied on our deep global expertise in industry management consulting, focusing on solving the unique problems faced by each industry and meeting the needs of the market. In doing so, we take into account the cultural differences and business practices of different countries and regions, and are committed to providing our clients with a range of highly customized services in areas including, but not limited to, corporate strategic planning, digital transformation, business process optimization, information technology implementation, and system operation and maintenance. We always keep abreast of the times and provide high-quality and diversified consulting services to domestic and international clients to help them successfully expand their business globally.

Exhibits



Website lumeotech.com

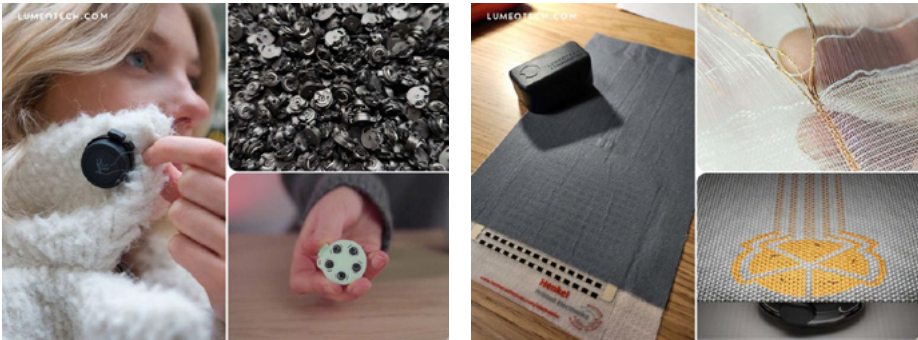
Contact 18724008024

Industry Wearables / IoT / Health / Medical Technology / Sports

Introduction

LumeoTech is dedicated to building bridges that connect the human body to technology. We develop connectivity surfaces that provide unprecedented connectivity, allowing people to connect anything to anything. LumeoTech can revolutionize the way wearable device developers connect, providing users with unparalleled freedom and convenience to wear wearable electronics easily and comfortably on fabric, hair, and even skin.

Exhibits



Project 1: TEXTILE ATTACHMENT

Standard Version: A connecting surface for textiles that creates a strong and convenient temporary connection between the device and the fabric without any pre-installation. The core module is highly scalable and can be adapted to different device sizes and weights.

Conductive Version: Based on the same core module as the standard version, it is possible to build a strong and reversible connection between devices such as controllers (e.g., power supplies, etc.) and smart fabrics, as well as to realize electrical signaling between devices and smart fabrics. This eliminates the need for wires and permanent connectors in smart garments, thus extending the product's life cycle and improving its comfort and utility.



Project 2: SKIN ATTACHMENT

A new technology for connecting electronic devices such as sensors directly to the skin that is non-invasive, robust and highly reusable. It consists of a connecting layer made of a combination of silicone + hydrogel and an original control layer, which allows truly arbitrary control over the creation and release of the connection.

Website <https://www.yahboom.com/>

Contact 18682082072

Industry Robotics education

Introduction

Founded in 2015, Yahboom is a leading global provider of artificial intelligence and robotics education solutions, integrating independent research and development, mass production and global sales as one of the high-tech enterprises in China. With the vision and mission of "lowering the threshold of creativity and popularizing robotics education", Yahboom continues to develop and innovate robotics technology and teaching applications. We are committed to solving the problem of high threshold of robotics learning and difficult teaching through independent research and development of teaching equipment models and application systems that can be quickly built. We promote the development of robotics education and train professionals in the field of robotics. After years of deep cultivation and precipitation, AGTech has formed a complete robotics education ecosystem covering product hardware, programming and control software, and online course platform, serving many students, teachers and developers. The company's main products are artificial intelligence bionic robots, polymorphic mobile platform robots, ROS system composite robots and peripheral equipment.

Exhibits

ROSMASTER X3PLUS

- ▶ 建图导航 语音交互
- ▶ 全向移动 识别抓取



Project 1: ROSMASTER X3 PLUS Composite Robot

ROSMaster X3 PLUS is a wheel omni-directional mobile composite robot developed based on ROS Robotics Operating System, which supports Jetson series motherboards and Raspberry Pi 4B as the main control, and is equipped with high-performance hardware configurations such as LIDAR, depth camera, and 6-degree-of-freedom robotic arm, and it can realize map building navigation, automatic driving, human feature recognition, voice recognition and control, mobile robot arm simulation control, mobile grasping, handling and other applications. As a full-featured composite robot, it is very suitable for robotics research and education programs in universities and research institutes.

ROSMASTER R2L

- ▶ 模型训练 自动驾驶
- ▶ 阿克曼转向底盘



Project 2: ROSMASTER R2L Autopilot Modeler

ROSMaster R2L is an Ackermann steering structure mobile robot developed for automatic driving scenarios. It uses Jetson series motherboard as the main control and is developed based on ROS robot operating system, which can realize robot motion control, remote control communication, model training, automatic driving and other applications. Applicable to automatic driving scenarios, through the automatic driving scenario settings, model training, visual recognition and ROS functions project-based, scenario-based, so that the ROS knowledge can be better applied in real projects, the trolley deployed Darknet YOLO to achieve traffic sign recognition and detection.

MUTO AI视觉六足机器人

- ▶ 18自由度关节
- ▶ 逆运动学算法
- ▶ SLAM建图导航



Project 3: MUTO RS Biomimetic Hexapod Robot

Muto RS is an 18-degree-of-freedom biomimetic hexapod robot based on the ROS2 operating system, supporting two main controllers: NVIDIA Jetson Nano and Raspberry Pi. The robot features high-performance hardware components such as intelligent bus servos, laser radar, depth cameras, and a voice interaction module. It can be used for a wide range of applications, including robot motion control, AI visual interaction, mapping and navigation, Docker container development, depth vision tracking, radar-based obstacle avoidance, 3D mapping navigation, and voice interaction. Muto RS is not only suitable for hexapod kinematics learning and validation but also offers a convenient integrated solution for ROS development. It comes with a comprehensive set of ROS courses and a wealth of instructional course documentation to help you quickly master ROS hexapod robotics."

Website <http://guidan.com>

Contact 13185712292

Industry Robotics Education

Introduction

Guidan Robot is a studio dedicated to creating personalized DIY robots. We cater to those who are full of imagination, who haven't grown up yet, or who feel like they may never grow up. They may be ordinary in many ways, but they are passionate dreamers when it comes to robots. Guidan Robot provides them with a wide range of self-developed hardware, software, systems, and fully-formed personalized robots, allowing them to easily and joyfully immerse themselves in the fun of the robot era."

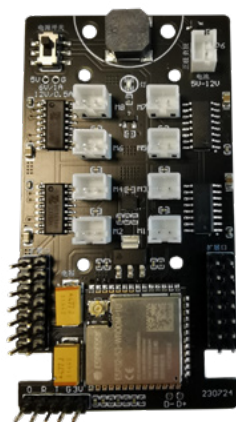
Exhibits



Project 1: A little Guidan robot dog with knowledge of Chinese kung fu

The Guidan Robot Dog, skilled in Chinese kung fu, is an entry-level robot enlightenment and play toy. Its structure is so simple that it only requires five screws, making it easy for even a child to assemble and complete their first robot dog. Once assembled, in addition to the more engaging remote control functionality than that of a remote-controlled car, you can also program interesting robot features for the Little Turtle Robot Dog.

Vedio: <https://weibo.com/6092740159/N95nVfPrI?pagetype=profilefeed>



Project 2: The Guidan Robot Development Board A3

The Guidan Robot Development Board A3 is an entry-level development board designed with a focus on creating motor-driven structure robots. Thanks to the onboard Little Turtle Robot system, robot enthusiasts can quickly and easily bring their motor-driven structure robot creations to life.

Website www.arducam.com

Contact info@arducam.com

Industry

Industries such as industrial production, precision agriculture, food and beverage, pharmaceutical manufacturing, logistics and warehousing, as well as consumer goods

Introduction

Arducam Technology Co., Limited is dedicated to the design and delivery of embedded visual solutions. Over the past eleven years, the company has achieved a series of significant milestones, particularly in the field of camera modules, with resolutions continuously increasing from 1MP to 108MP. Our interfaces range from SPI, MIPI, to USB, and our platforms encompass MCU, Raspberry Pi, NVIDIA Jetson, and PC. From makers to industrial enterprises, Arducam is meeting increasingly sophisticated professional requirements, developing a diverse range of solutions that reach a broader spectrum of user scenarios. As a dynamic provider of embedded visual solutions, we will continue to make embedded visual hardware simpler.

Exhibits



Project 1: High-definition autofocus scanner

Arducam's high-definition autofocus scanner, built on the powerful Raspberry Pi CM4, integrates its 'Hawkeye' 64MP autofocus camera module and associated hardware and software, making the scanning and recognition of tiny 2D barcodes simple and fast, thereby enhancing user productivity. Application scenario: the fast and accurate recognition of small 2D barcodes.

Project 2: Textile Inspection Solutions

Arducam seamlessly integrates the powerful Raspberry Pi CM4 with an industrial-grade global shutter sensor and, combined with Arducam's patented multi-camera technology, has developed a tailored solution for textile quality inspection. This ensures the precise identification of defects in various aspects such as weaving, dyeing, and printing in fast-moving inspection objects. Application scenarios: quality inspection for various types of fabrics, including greige fabric, colored woven fabric, piece dyeing, vat dyeing, and non-woven fabric.

Project 3: Crop Intelligent Harvesting Solution

Arducam leverages the powerful computing capabilities of Raspberry Pi CM4 to introduce a groundbreaking Crop Intelligent Harvesting Solution. Through Arducam's unique multi-camera technology, this solution integrates four high-resolution camera modules, enabling effortless harvesting assistance and precise, intelligent data collection. Application scenario: the harvesting of specific crops.

Project 4: Agricultural Drone Surveying Solution

Built on Raspberry Pi CM4, Arducam introduces a tailored machine vision solution for agricultural drones. This solution seamlessly integrates four camera modules with pixel resolutions of up to 12MP and a range of optical filters for versatile multispectral imaging, making it a powerful tool for analyzing soil productivity and crop health. Application scenario: agricultural drones."

Project 5: Smart Shopping Car

Utilizing the powerful computing capabilities of the Raspberry Pi CM4, Arducam seamlessly integrates "Time of Flight" (ToF) camera modules and high-sensitivity low-light modules in this solution. This component enables easy product recognition, classification, and counting within shopping carts, even in extremely dark

environments, providing convenience for shoppers and enhancing store management efficiency. Application scenario: various retail stores and warehouses.

Project 6: AI Industrial Smart Camera

This compact and rugged AI camera integrates Raspberry Pi CM4 and high-quality image sensors within a durable metal casing, providing Power over Ethernet (PoE) support, abundant interfaces, and a wealth of pre-installed software and examples. The Prime version comes with powerful industrial-grade features, including depth sensing, object tracking, and edge computing tasks. Optional waterproofing and LED lighting are available. In addition to products, we also offer full-cycle customer service and welcome customization requests. Application scenarios: Suitable for professional safety, SOP monitoring, product inspection, identification, and classification, widely used in industries such as industrial production, food and beverage, pharmaceutical manufacturing, logistics and warehousing, agriculture, and consumer goods."

Website www.dexforce.com/

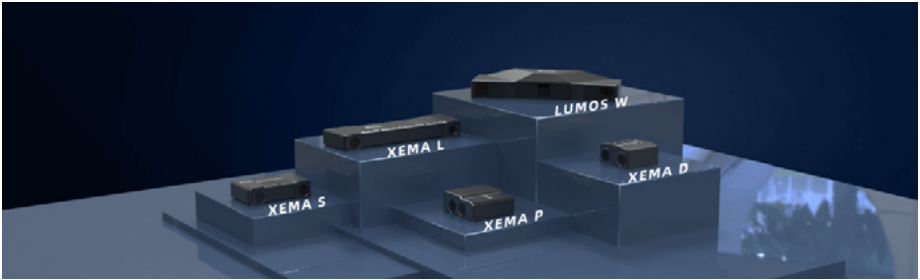
Contact 13510839592

Industry Home Appliances / Auto Parts / New Energy / Engineering Machinery / Consumer Electronics / Logistics & E-commerce / Medical Equipment / Chemicals, etc.

Introduction

DEXFORCE Intelligence Technology Co., Ltd., is a high-tech artificial intelligence company leading the forefront of 3D vision solutions with Sim2Real AI technology. The company is dedicated to empowering verticals such as robotic arm flexible operations with advanced 3D geometric deep learning technology, providing customers with AI vision algorithms, 3D smart cameras, and cost-effective hardware and software integrated 3D vision solutions. This enables robots to perform tasks such as localization, recognition, and guidance in complex environments based on 3D vision in a flexible and proactive manner."

Exhibits



Project 1: DEXFORCE XEMA Arctic Seagull Series Open-Source Camera

Product Introduction: The XEMA Arctic Seagull Series open-source camera utilizes active DLP structured light technology, offering fast capture speed, fine imaging, and a mature and stable solution. It can produce high-quality point cloud data for various object types in different application scenarios, boasting high accuracy, fast processing, and strong adaptability to the environment.

Open-source product repository: <https://open3dv.org/>

Application Scenarios: This camera is suitable for a variety of applications, including workpiece loading and unloading, pallet disassembly, and robot vision guidance."

Project 2: DEXFORCE LUMOS Laser Scanning Mirror

The LUMOS Series Camera Encoder Projector utilizes high-power laser scanning mirrors, ensuring a clear projection effect even at long distances. It also features a wider field of view and industrial-grade protective design, making it suitable for industrial large-field applications such as pallet disassembly and object grasping in visual scenarios. It offers high precision, deep depth of field, and a broad field of view.

Website <http://www.world-semi.com>

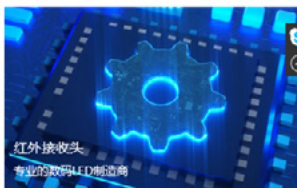
Contact 0769-81619276

Industry Sensor Control Applications / Glass Curtain Walls / Consumer Decorations / LED Strip Light Applications / Municipal Lighting / Customized Products

Introduction

WORLDSEMI was founded in 2007 and is the only global company with independent control IC design and manufacturing processes. We specialize in research, production, and sales to meet all customer customization requirements and are one of the earliest and most professional digital LED manufacturers. We possess state-of-the-art, high-precision, fully automated production, packaging, and testing equipment, a top-notch team of technical researchers, and a rigorous quality management system. Our primary products include WS2801S, WS2811, IC series, as well as WS2812, WS2813, WS2815, WS2816, and other series of built-in driver digital LEDs. We adhere to the service philosophy of 'Survival through Quality and Customer-Centric' and prioritize professional, technology-driven innovation to provide our customers with the best products and technical support.

Exhibits



Website Product website: www.icrobot.com
Official Education Website: www.icrobot.cn

Industry Robot Programming / Creative Education

Contact 18554878885

Introduction

I Create Robot is an educational technology company with a core focus on technology innovation in education, as well as the development and production of intelligent hardware for educational robots. The ICreate brand was established in 2007 and has been dedicated to youth technology innovation education for 17 years. It has more than 200 robot technology activity centers both domestically and internationally. In 2015, ICreate established a research and development center, leveraging 17 years of educational experience to develop a series of robot programming and maker education products suitable for teaching purposes. These products are widely used in over 200 robot technology activity centers across the country. The product offerings are complemented by a rich curriculum system that has been refined through hundreds of school practices. Today, it has evolved into a multidisciplinary and highly practical curriculum system that is greatly appreciated by STEM educators.

Exhibits



Project 1: ICBlocks Early Childhood Physical Programming Robot

It innovatively employs magnetic physical programming instructions, suitable for children aged 3-6 to learn programming without the use of a computer, reducing screen-related eye strain.

Project 2: ICQbot Interactive Programming Robot

It incorporates offline voice recognition module (supporting voice programming), Bluetooth interactive programming with Scratch Jr (an industry first), and sensor logic control functions. It effectively addresses the issue of limited transitional courses for robotics training institutions.

Project 3: ICreate Modular Mini 3D Printer

It's an assembly-friendly 3D printer designed for teenagers. This modular mini 3D printer allows young learners to gain an in-depth understanding of the internal structure of 3D printers. It's suitable for robot programming institutions, maker education organizations, and science education research and learning centers, offering distinctive 3D printing courses.

Project 4: ICRobot Mega Metal Robot

A water bomb, programmable assembled metal robot, which is characterized by compact size, stable structure and function, strong expandability, and can support the expansion of robotic, ultrasonic and other modules. It not only retains the ornamental and competitive characteristics of the water bomb robot, but also solves the problem of taking up more space.

Project 5: ICPad Artificial Intelligence Programming Workstation

ICPad Artificial Intelligence Programming Workstation is an integrated teaching and learning platform based on the Raspberry Pi. It includes a touchscreen display, mouse and keyboard, power supply, and exposes all GPIO extension ports. It can be used as a programming computer for robotics education, making it ideal for artificial intelligence project-based teaching in schools.

Project 6: Miniature Smart Cultivation System

It is an intelligent cultivation system based on soilless growing substrates. It includes intelligent irrigation, supplementary lighting, ventilation, and aquaponics systems. Students build the smart cultivation system through assembly and programming, allowing for a perfect fusion of vocational and maker education with hands-on learning.

Debut Exhibit

ICQbot and the Miniature Smart Cultivation System.

Website www.elecrow.com

Contact info@elecrow.com

Industry Open Source Hardware, STEAM Education

Introduction

Elecrow, founded in 2014, is a technology company based in Shenzhen, China, specializing in research, development, production, and sales. The company focuses on the research and sales of products in open-source hardware, Internet of Things, smart home, STEAM education, and provides comprehensive OEM/ODM services. With a mission to make creation easier, Elecrow serves customers from over 150 countries and regions worldwide, offering high-quality services and products to electronic enthusiasts, makers, engineers, and businesses.

Exhibits



1.Crowview

CrowView is Elecrow's latest 14-inch mechanical clamp-on extended display, which gained global popularity after a successful Kickstarter crowdfunding campaign in 2023. Portable and lightweight, CrowView is compatible with various operating systems, making it the top choice for enhancing work efficiency.

2.CrowPi Series Raspberry Pi Programming Learning Computer

Don't Buy a Raspberry Pi Until You've Seen CrowPi All-in-One Kit -- Reviewed by MUO.

The CrowPi series includes three versions: CrowPi, CrowPi2, and CrowPiL, offering students a comprehensive platform for learning programming and electronics-related knowledge.

CrowPi, short for "Creative Raspberry Pi," is a Raspberry Pi-based educational tool designed for programming and DIY electronics projects. It packages the common components needed for DIY electronic projects into the CrowPi development board. Users can learn basic computer science, programming, and Raspberry Pi knowledge with CrowPi. In May 2018, CrowPi was first launched on Kickstarter, successfully reaching its crowdfunding goals and receiving positive feedback and broad support from users.

CrowPi2, developed in 2020 as a second-generation electronic programming learning device based on CrowPi, features a detachable magnetic keyboard. Removing the keyboard reveals an integrated hardware lab with various sensors, ideal for STEAM education (comes with abundant STEAM educational resources). When the keyboard is attached, it functions as a powerful, portable notebook computer. CrowPi2 was recognized as "Our Favorite Project" on the Kickstarter platform.

CrowPiL, introduced in 2022, is a streamlined version based on CrowPi2. It is specifically designed for beginners in programming. CrowPiL addresses various issues raised by CrowPi users and Raspberry Pi enthusiasts, such as Raspberry Pi installation, system switching, external monitor connections, and built-in battery power supply, providing users with an enhanced and superior user experience.

3.ESP32 IOT Screen

Elecrow has introduced a range of ESP32 HMI touch screens, primarily designed for building IoT devices, smart home systems, sensor networks, and other embedded applications. With their robust processing capabilities, abundant interfaces, and user-friendly development environment, they provide users with a flexible and expandable development platform.

Debut Exhibit

CrowView is a brand-new extended screen introduced by ELECROW on the KICKSTARTER platform in 2023. The ESP32 IOT series screens are a key product line from ELECROW and have achieved global success since their launch in March 2023.

Website <https://entsz.com/>

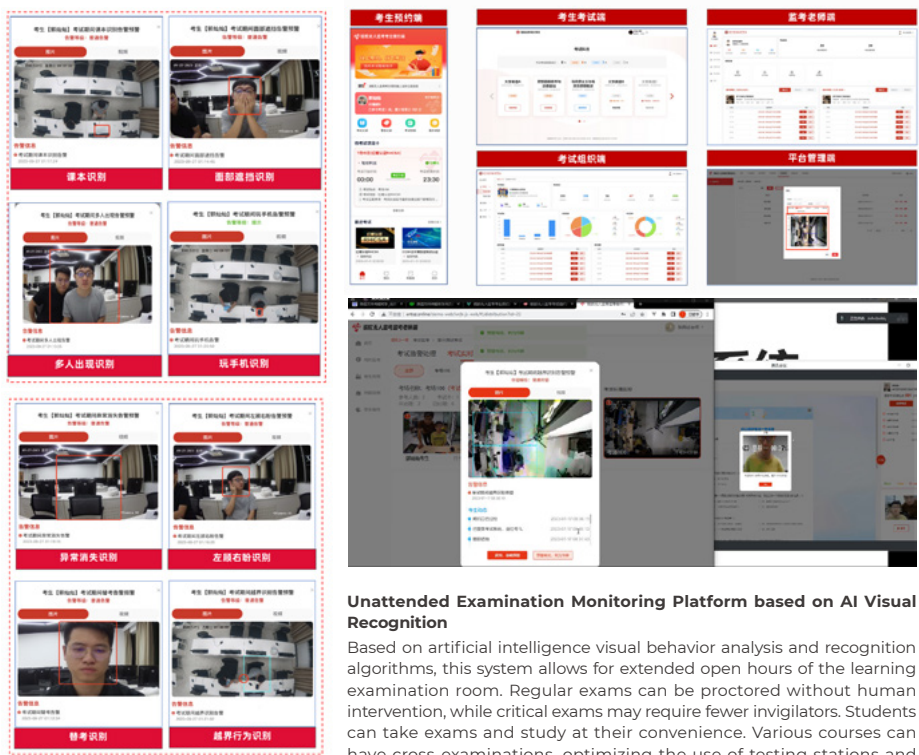
Contact 13798588486

Industry Education

Introduction

RuiTaiTechnology (Shenzhen) Co., Ltd. is a technology-oriented company specializing in the development of AI visual recognition software and hardware, primarily in the education industry. Our core product is an unmanned proctoring platform based on AI visual recognition. With a focus on user value, we integrate solutions into our products and services to provide innovative solutions to the education sector. Additionally, we are committed to driving the digital transformation of traditional industries to promote sustainable societal development. Wiseshare Technology boasts a team of highly efficient and reliable developers who deliver the best information technology solutions to our customers with exceptional technology and service.

Exhibits



Unattended Examination Monitoring Platform based on AI Visual Recognition

Based on artificial intelligence visual behavior analysis and recognition algorithms, this system allows for extended open hours of the learning examination room. Regular exams can be proctored without human intervention, while critical exams may require fewer invigilators. Students can take exams and study at their convenience. Various courses can have cross-examinations, optimizing the use of testing stations and making the most of available time, which reduces the workload and oversight associated with manual proctoring. This system provides convenience for students while significantly reducing the cost of exam administration.

Website

/

Contact

13751017974

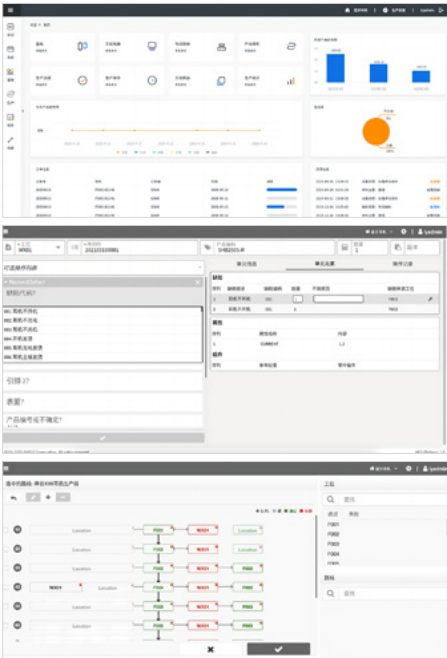
Industry

Manufacturing industry

Introduction

Shenzhen GuNong Technology Co., Ltd. is a software company specializing in cloud MES system development, dedicated to delivering efficient, intelligent, and innovative solutions for manufacturing industry customers. We have an experienced team with professional expertise, capable of providing customized solutions and comprehensive support and services. Our core values revolve around customer-centricity, innovation-driven approaches, and team collaboration. We establish long-term partnerships with our clients and continuously introduce new features and technologies to meet their needs.

Exhibits



The GuNong Cloud Manufacturing Execution Management System

The Gufarm Cloud Manufacturing Execution Management System leverages real-time data collection, multi-platform and multi-role collaboration, big data visualization, and deep learning for intelligent decision-making. It helps production-oriented enterprises address issues such as delayed deliveries, inventory buildup, low worker efficiency, and production process opacity, ultimately improving production efficiency, reducing manufacturing costs, bridging information silos, and achieving true data-driven manufacturing.

The Smart Factory Edge Computing Integrated Device is an extension of Alibaba Cloud's capabilities at the edge. It inherits Alibaba Cloud's strengths in security, storage, computing, and artificial intelligence. It can be deployed in different scales of intelligent devices and computing nodes. It connects devices with different protocols and data formats through defined physical models, providing secure, reliable, low-latency, cost-effective, and easily scalable local computing services. Additionally, it can integrate Alibaba Cloud's capabilities in big data, AI learning, voice, video, and more, to create a three-in-one cloud-edge-edge computing system.

Website <http://www.tiemu.com>

Contact 13870263613

Industry Cybercafes, gaming hotels and other e-sports leisure and entertainment industries

Introduction

Iron Curtain Gaming was founded in 2014 and is located in Shenzhen, the R&D and manufacturing base of electronic products in China. It is one of the earliest companies engaged in gaming monitors in China. As one of China's gaming monitor companies, the company has strong technical strength, now has more than dozens of R & D personnel, as of 2023, won 200+ technology patents.

Exhibits



TIEM Smart AI Gaming Monitor

It supports voice commands and provides immediate response to physical peripherals. Through an artificial intelligence (AI) chip, it can achieve voice-controlled adjustments to display settings, eliminating the need to pause the game to configure the gaming mode. During competitive gaming, it enables human-machine interaction.



Website /
Industry Biomedical

Contact 18589056688

Introduction

JIN FENG BIOLOGY Co., Ltd. is the only comprehensive industry chain enterprise in the field of Yuanbao Maple cultivation, research, production, and sales. Golden Maple Biotechnology is the vice president unit of the National Forestry Industry Association, and its products are designated as National Forest Eco-Label products, and have obtained FDA registration in the United States. It is a leading enterprise in Yunnan's forestry sector and a high-tech innovative company. In 2018, the company was approved by the Shenzhen Municipal Government to establish the Yuanbao Maple Biomedical Research Institute, which has gathered top neuroscientists from around the world for in-depth research and new drug development on Yuanbao Maple.

The institute has also obtained numerous domestic and international invention patents. In November 2018, the Shenzhen Municipal Government approved the establishment of the Shenzhen Yuanbao Maple Biomedical Research Institute, which is the first and currently the only private non-enterprise institution specializing in the research of Yuanbao Maple biomedicine in the industry. The institute collaborates with top institutions such as the National Key Laboratory for Biomedical Therapy at West China Hospital, Huazhong University of Science and Technology Tongji Medical College, Peking University Shenzhen Graduate School, Southwest Forestry University, and the Toxicology Research Institute of Shenzhen Center for Disease Control and Prevention to deeply research and develop the medicinal value of Yuanbao Maple.

Exhibits



JIN FENG LU

Developed jointly by several national biological key laboratories, including the National Key Laboratory for Biomedical Therapy at West China Hospital, the product is currently in the first-phase approval stage for clinical drugs in both China and the United States. The core product is Yuanbao Maple Seed Oil and its extracts, with a focus on the development of drugs for neurodegenerative diseases, aiming to benefit countless households.

Seed Studio - IoT Application Group

No. C28

Website www.seedstudio.com.cn

Contact 0755-86163976

Industry Smart Agriculture

Introduction



The SenseCAP series comprises a range of products, including the all-in-one weather station, LoRaWAN soil moisture sensor, water quality monitoring sensor, LoRaWAN environmental monitoring sensor, 10-in-1 weather sensor, 9-in-1 weather sensor, 8-in-1 weather sensor, 7-in-1 weather sensor, 5-in-1 weather sensor, ultrasonic wind speed and direction sensor, as well as the SenseCAP 4G sensor hub, among others. These products have earned notable recognition, such as the "Annual Innovative Product in Smart Agriculture" and the "Outstanding Product Award" at the 22nd China International High-Tech Achievement Fair (High-Tech Fair). They have also

been honored with the "Golden Cotton Award" in Chinese Agriculture and secured spots in the "2020 Shenzhen Green Technology Promotion Catalog" as one of the top 20 new equipment for agriculture and food. Furthermore, they were chosen as one of the "Top 30 Typical Cases of Smart Agriculture Seed Engineering in 2020". These products were finalists in the "Outstanding Cases of New Technologies, New Products, and New Models in Digital Agriculture and Rural Areas in 2021". They were incorporated into the supporting products for smart poles in Shenzhen (2021 Product Entry Enterprises) and received accolades like the "Best Smart Agriculture Application Solution Award" at the 2021 China IoT (Internet of Things) Expo, as well as the "Gold Award for Innovative Products at IOTE2023".

Exhibits



Product Overview: Advanced Perception Systems from Modules to Devices



SenseCAP LoRaWAN Series



SenseCAP One Weather Sensor



SenseCAP Sensor Hub

Debut Exhibit



Multi-Element Environmental Sensor

The Multi-Element Environmental Sensor is a user-friendly, low-power data collector with stable performance. The device measures various elements such as temperature, humidity, dew point, illumination, carbon dioxide, atmospheric pressure, etc. It also supports the expansion of up to 10 Modbus-RTU RS485 sensors, allowing it to connect to most types of sensors available on the market.

The device uploads the collected data to a designated server via 4G using the MQTT protocol. It comes with a built-in solar panel and a large-capacity rechargeable lithium battery, ensuring it

can operate for up to two weeks even in rainy weather or during power outages, while also supporting continuous electric power supply. In case of weak communication signals or network outages, the device can locally cache up to 500,000 pieces of data. This data can be uploaded to the server once communication is restored or exported directly from the local storage, greatly reducing the risk of data loss.

7-in-1 Meteorological Sensor (Radar Rainfall)

The 7-in-1 Meteorological Sensor (Radar Rainfall) is primarily designed to monitor various elements including temperature, humidity, atmospheric pressure, wind speed, wind direction, rainfall, and light intensity. For wind speed and wind direction, it utilizes ultrasonic wind measurement technology, while radar measurement technology is employed for rainfall data. This sensor serves as a pivotal component in microclimate monitoring stations for agricultural fields and, when combined with the 4G multi-channel sensor hub, solar power system, and other installation accessories, it forms a comprehensive and intelligent weather monitoring station.

Shenzhen Deep Blue Data Digital Agriculture Technology Co., Ltd.

No. C29

Website <http://www.digiagric.com/>

Contact 15986768607

Industry Agriculture

Introduction

Deep Blue Data Digital Agriculture Technology Co., Ltd. is a technology company dedicated to the development and application of agricultural data, as well as providing technological support services for rural revitalization. Deep Blue integrates digital technology into the agricultural industry, establishing a comprehensive system covering the entire agricultural industry chain. It combines the industrialization of agricultural scientific and technological achievements with rural revitalization, creating an innovative collaborative model for technological services in rural revitalization. Deep Blue seamlessly merges data technology with the agricultural industry, conducting data engineering in areas such as smart agriculture, smart animal husbandry, smart fisheries, and smart agricultural machinery and equipment. The company has established various analysis models for different links in the agricultural production and supply chain, and has developed a precise analysis system for boosting cost-effectiveness across the entire agricultural industry chain.

Exhibits



National Cassava Industry Technology System Data Center

The National Cassava Industry Technology System Data Center, operating under the guidance of the Chief Office of the National Cassava Industry Technology System, leverages digital, IoT, and intelligent technologies to establish a comprehensive data system covering the entire cassava industry chain. With a focus on authenticity, precision, dynamism, and practicality, the center gathers and integrates cassava industry data resources. It acts as a platform for providing innovative and high-quality services to government, industry, academia, and research. The inauguration of the National Cassava Industry Technology System Data Center marks a significant milestone in the digitization of the agricultural industry, positioning it as a pioneering model in the development of agricultural industry data systems.

Website <http://www.etfield.cn/>

Contact 13540102255

Industry Smart Soil-free Agriculture

Introduction



Chengdu Etfield Agri-Eco Tech Co., Ltd was established in 2016 and is an agricultural technology service company that focuses on research in blueberry and high-end fruit cultivation. We specialize in modern eco-friendly agriculture cultivation, planning and operations, seed breeding, technology promotion, and smart agricultural construction. In 2019, "Etfield Agriculture" was recognized as the "most promising brand in China's agriculture sector," and in 2020, it was named a "high-tech enterprise". Our company has established strategic partnerships with Dalian University, Sichuan Agricultural University, Sichuan Provincial Natural Resources Science Research Institute, Chengdu Agricultural Science and Technology Vocational College, as well as the UK's largest fruit

company "Haygrove" and Israel's "Netafim" company to promote blueberry cultivation and related technologies.

We have a modern agricultural demonstration and scientific research base of 150 acres in Pengzhen, Shuangliu District, Chengdu, and a digital soil-free blueberry planting base of 330 acres in Dechang County, Liangshan, which can supply fresh blueberries for up to six months from December to May, with a yield of up to 600,000 kilograms. Additionally, we also specialize in developing blueberry red wine, blueberry brandy, blueberry honey, and other products. After seven years of development, our company has obtained 22 patents related to blueberry planting and processing, six software copyrights, four research and development standard systems, one provincial-level scientific and technological achievement, one blueberry new variety right, and provides a full-range smart planting solution for blueberries.

Exhibits



Digital Soil-Free Blueberry

It is a digital management system for soil-free cultivation of blueberries. With digital sensors, it intelligently monitors the blueberry's growth, automatically controls water and nutrient supply, regulates the growing environment, and implements efficient and accurate planting management solutions.

1. RNSC Technical Standard System for Digital Soil-Free Blueberries

We have established a complete set of technical standard systems (RNSC) for digital and intelligent management of blueberries, covering site selection, risk assessment, planting systems, facility equipment, smart irrigation systems, field production, and harvest storage, among others. This allows us to achieve a fully integrated and digitalized management system for blueberries.

2. PGM Growth Monitoring System and "Yizhimei" IoT Control Platform

Through Etfield's independent research and development of the PGM (Plant Grow Monitoring) system, we can monitor the growth of blueberry plants (water and nutrient levels) in real-time. This system monitors the inflow (drip volume, EC, pH), outflow (drainage volume, EC, pH), and transpiration changes of the plants, combined with the meteorological environmental monitoring system. This allows us to adjust the irrigation time nodes, single-minute values, EC and pH control thresholds that are suitable for the real-time growth of blueberries during different stages of their development. Furthermore, we can determine the stage discharge ratio and total discharge ratio, which enable us to provide precise automatic water and nutrient irrigation for soil-free blueberries, via the "Yizhimei" IoT control platform, which collects and analyzes data. This technology reduces labor, reduces human error, saves fertilizer, and ensures healthy plant growth under optimal water and nutrient conditions.

3. Professional "Butler-style" Services

In addition to providing advanced technology and high-quality products for site planning, construction, and cultivation, we also offer comprehensive and high-quality services to growers. These include online real-time monitoring and personalized follow-up, as well as offline technical support by our experienced personnel, who provide periodic site visits to ensure optimal cultivation practices. Such services alleviate growers' concerns and ensure maximum yields and profits. At Etfield Blueberry, we strive to be the trusted butler for your blueberry cultivation needs.



Website <https://m.cpic.com.cn/index.shtml>

Contact 15070808038

Industry Agriculture

Introduction

China Pacific Insurance Co., Ltd. (CPIC) was founded in 1991 and is headquartered in Shanghai. As a leading comprehensive insurance group in China, CPIC is the only insurance company that is listed in Shanghai, Hong Kong, and London (A+H+G) and has been included in the Fortune Global 500 for twelve consecutive years.

China Pacific Insurance Co., Ltd. Shenzhen Branch (referred to as CPIC Shenzhen Branch), was established in 1992 and is a city-level subsidiary of CPIC's insurance division. CPIC Shenzhen Branch aims to be a leader in the healthy and stable development of the industry by providing the best customer experience, the highest quality business operations, and the strongest risk control ability. We adhere to the service philosophy of "Responsibility, Wisdom, and Warmth," actively serving the national strategy and the local economy, and focusing on emerging fields such as cross-border e-commerce, new energy, flexible employment, express logistics, and urban agriculture. We are committed to protecting and supporting Shenzhen's economic development and social welfare by providing high-level risk protection services.

Over the past four years, CPIC Shenzhen Branch has actively sought transformation and breakthroughs and embarked on a systematic transformational development path. We have achieved a steady growth in premiums and market share, with a gradual increase in incremental premiums and growth rate. Our market share has increased from 10.94% in 2018 to 13.16% in 2022, a cumulative increase of 2.2 percentage points, ranking among the top three in the Shenzhen market. In the first half of 2023, our market share reached 14.19%, an increase of 0.93 percentage points year on year, and our premium growth rate was 12.6%. Our development has continued to improve, ensuring that we continue to contribute to Shenzhen's economic development.

CPIC Shenzhen Branch covers various aspects of property insurance and has established a specialized, standardized, and market-oriented risk management mechanism to provide customers with various property insurance, liability insurance, short-term health insurance, and accident insurance. We provide services covering a wide range of industries and fields, including power and energy, new energy, petrochemicals, basic infrastructure, financial trade, maritime transportation, machinery and equipment, electronic communications, warehousing and logistics, textiles and tobacco, and scientific and technological innovation.

CPIC Shenzhen Branch actively shoulders social responsibilities, spreading love and warmth. We have participated in charity events such as caring for sanitation workers, assisting students from impoverished families, poverty alleviation, and ecological protection, and have been awarded the "Love Enterprise" title for multiple years. Since 2019, we have sponsored accident insurance for over 30,000 sanitation workers in Shenzhen for four consecutive years, with a total sponsorship amount exceeding 13 billion yuan. In addition, our company has deeply integrated into Shenzhen's volunteer culture, actively engaging in volunteer services, and holding series of public welfare activities in communities such as anti-fraud and personal injury first aid knowledge promotion, and consumer rights protection. In 2023, our company was awarded the title of "Youth Civilization Unit" in Shenzhen.

Exhibits

农业指数保险定义及特点



农业指数保险理论分类



注：引用自张敬博《农业指数保险的发展、应用与建议》

"Innovative Development: CPIC Agricultural Insurance Supports Rural Revitalization"

CPIC aims to support the national strategy of rural revitalization by exploring innovative, index-based insurance protection for special agricultural development areas, using technology to enhance the agricultural insurance industry in the three rural sectors.

Website www.mlogcn.com

Contact 13581655642

Industry Agriculture

Introduction

Beijing MLog Meteorological Technology Co., Ltd., established in August 2015, is a leading meteorological big data company co-founded by the Huafeng Group of China Meteorological Administration and MLog Technology. It is a national high-tech enterprise and an executive director unit of the China Meteorological Service Association. It is also a director unit of the Shanghai Tai'an Agriculture Insurance Research Institute. The company has obtained both domestic and international authoritative certifications, such as ISO9001, ISO20000, ISO27001. With a top-notch R&D team, the company has obtained more than 30 national patents in meteorology and more than ten trademark copyrights.

By focusing on meteorological big data, insurance meteorological services, and agricultural meteorological services, the company adheres to a customer-centric strategy, providing customers with one-stop weather risk management solutions through professional service platforms, decision guidance, and meteorological finance. The company provides specialized and intelligent agricultural meteorological solutions, including smart agriculture production, monitoring and forecasting of crop growth, efficient disaster prevention and mitigation, food source tracking, climate quality verification, yield prediction, and specialized agricultural insurance services. The company is committed to promoting the informatization and big data integration of the agricultural industry, helping to drive high-quality development of China's agricultural industry, and contributing to the construction of a better digital China.

Meteorological Big Data Cloud Platform: Our company integrates the latest meteorological forecasting technology with commercial demands, developing the first commercial meteorological big data cloud platform in China. The platform integrates data storage, computing, processing, and product output, meeting the needs of both customers and developers. We have independently developed the world's leading AI Weather intelligent forecasting technology which provides precise space-time scale forecasting with an accuracy of one kilometer per minute. Our platform offers comprehensive forecasting services, including precipitation, thunderstorms, hail, strong winds, visibility, and other meteorological elements.

Meteorological Insurance Service: We provide the insurance industry with agricultural big data analysis, meteorological insurance product research and development, agricultural insurance rate zoning, fine-grained monitoring and warning of meteorological risks, grain-crop satellite remote sensing yield estimation, heavy rainfall and flood warning, insurance claim decision-making services, and more. Our services span multiple stages of agricultural insurance, including underwriting, risk alert and management, and claims handling, helping insurance companies prevent and mitigate losses, reduce payouts, and improve service efficiency.

Agricultural Meteorological Services: Based on our original meteorological big data cloud platform, we provide land parcel-level meteorological services to support smart agriculture. At the same time, we integrate modern information technologies such as remote sensing, the Internet of Things, and automation to provide farmers with intelligent production decision-making, risk management (including natural disasters and pests), quality certification, and other services. We provide information technology solutions for disaster prevention and mitigation, cost reduction, and efficiency improvement in agricultural production and help producers reduce input costs, avoid risks, increase yields, and maximize benefits.

Exhibits



Chongqing Smart Agriculture Service System

The System has jointly developed five modules: agricultural meteorological big data, monitoring, forecasting, assessment, and system management. Through intelligent analysis of agricultural meteorological conditions and automated operation using algorithms, the system produces precision agricultural meteorological products. This has taken a key step towards intensive and intelligent production of agricultural meteorological services and interactive engagement between experts and farmers. The system uses a variety of methods including smartphone apps, web pages, and desktop applications to form an interdisciplinary expert alliance. Based on field-specific data, the system provides a two-way, precision, direct agricultural meteorological service for large-scale plantation and animal husbandry operations and agricultural enterprises.

Website www.deltron.tech

Contact 18025428750

Industry Agriculture

Introduction

Shenzhen Deltron Intelligent Innovation Technology Co., Ltd. is a national high-tech company that has independently developed intelligent modules. Their core team members come from the Hong Kong University of Science and Technology's Robotics Institute and Microsoft Asia Research Institute under the guidance of Professor Li Zexiang (former chairman of DJI Innovation and chairman of GoHigher Investment). The company focuses on applying robotics and intelligent technology in the agricultural field, with standardized post-harvest processing of fruits and vegetables as its first step. They utilize cutting-edge AI vision and spectral technology, and have independently developed and manufactured the "AI Fruit Post-Harvest Smart Selection Equipment" and "Smart Fruit Tester" portable fruit non-destructive testing equipment. These two core products, which cover industry upstream and downstream, realize fruit standardization from the source while also providing comprehensive quality testing from the inside out, achieving scientific and efficient fruit sorting.

Shenzhen Deltron is committed to empowering China's agriculture industry through AI and robotics technology, with a mission to "implement AI and robotics in modern agriculture." They have won a series of awards, including the Excellent Award at the 6th National "Chuangqingchun" Innovation and Entrepreneurship Competition, the Red Dot Award for Product Design, the Best Popularity Award at the 13th iFresh Asia Fruit and Vegetable Industry Expo, and the Gold Award at the Hong Kong Million Entrepreneurship Competition.

In July 2022, they were the first "fruit post-harvest processing equipment" to be featured in a special interview by the CCTV Agricultural and Rural Channel's flagship program "I Love Inventions." In the same year, they were awarded the Excellent Technology Innovation Demonstration Case by the Ministry of Commerce, and selected as one of the first batch of intelligent robot application demonstration typical cases in Shenzhen in 2023.

The company has completed the development of its two core products and their application from the market perspective, serving clients including Fortune 500 company Walmart, Baiguoyuan, and local agriculture and rural bureaus. They have also begun commercial operations in Yunnan, Guangxi, Guangdong, Shandong, Hubei, Xinjiang, Shaanxi, and Chongqing, promoting the transformation and upgrading of fruit sorting.

Exhibits



AI Fruit Post-Harvest Smart Selection Equipment

Using their self-developed visual spectral technology and algorithms, as well as their hardware development expertise, Deltron has created sorting solutions for dozens of fruits through their AI Fruit Post-Harvest Smart Selection Equipment. This technology achieves high accuracy rates of up to 98% for external blemishes and 95% for internal quality checks, enabling non-destructive, fast, and accurate grading and sorting of fruits. This not only automates the sorting process to reduce costs and increase efficiency but also upgrades the fruit industry by improving fruit quality and standards.

Application: fruit processing plants, cold chain logistics bases, orchards, and agricultural industrial parks.

Website <http://www.kinghooagro.com/Home.html>

Contact 15701320552 /13552121325

Industry Agriculture

Introduction

Established in 2015, Beijing Kinghoo AgroTech Co., Ltd (referred to as Kinghoo AgroTech) is a provider of intelligent solutions for the agriculture and animal husbandry industry. Committed to the concept of "Artificial Intelligence to Agro" (A2A), the company integrates advanced breeding equipment from both domestic and international sources. It also brings together renowned veterinarians, nutritionists, and senior information engineers. Kinghoo AgroTech is dedicated to offering comprehensive, professional, and innovative smart breeding solutions to users in the global breeding industry.

Presently, Kinghoo AgroTech holds multiple IP protections and focuses on providing services such as pasture process design, equipment introduction, disease prevention and diagnosis, pasture management consulting, IoT solutions, comprehensive pasture management software, pasture data analysis, and animal drug traceability systems to the breeding industry. They have independently developed the bilingual AI diagnostic app "Kinghoo E-line", which applies self-service algorithms to automatic diagnosis of animal diseases and robotic veterinary services. This marks Kinghoo AgroTech as the world's first enterprise to create an animal disease database using AI+AR technology. In 2019, they also developed the "FarmzAI" platform for visualized management and analysis of breeding farms. This platform integrates and analyzes data from feeding, water supply, environmental systems, and more, providing real-time insights into farm conditions.

Exhibits



Intelligent Breeding Solution Provider

Kinghoo AgroTech has developed its own software called 'FarmzAI', an integrated platform for intelligent breeding management and analysis. By combining precise sensors, it enables real-time data monitoring in poultry farms. Empowered by digital twin technology, the 'Digital Twin Poultry Farm' is a standout feature of FarmzAI, allowing breeders to remotely control and manage their farms. This has led to rapid cost reduction and increased efficiency for breeding farms.

FarmzAI goes beyond being a simple data collection software. It employs advanced machine learning technology and autonomous learning capabilities, as well as AI prediction and analysis functions, to help breeders monitor crucial indicators in their farms. It predicts various key indicators,

enabling breeders to take proactive measures before issues arise. The robust machine learning capabilities of FarmzAI ensure that its data analysis becomes increasingly accurate as it is put into use on the farm.

The introduction of the AI Smart Visual Station has also addressed many challenges faced by breeders. It has been successfully implemented in multiple pig farms, featuring precise alerts and powerful computing capabilities. Tailored AI models and algorithms have been developed for various monitoring scenarios required in the livestock industry. This significantly contributes to cost reduction and increased efficiency in biosecurity management, alleviating the pressure on farms.

In addition to integrated hardware and software solutions and AI visual stations, the expert team at Kinghoo AgroTech also provides professional consulting services for breeding farms. As a specialized and comprehensive intelligent breeding solution provider, Kinghoo AgroTech excels in delivering tailored solutions for the industry.

Website <http://www.wego-group.com/>

Contact 19520812606

Industry Agriculture

Introduction



丰农控股旗下智慧农业服务业务

a modern agricultural service ecosystem for rural revitalization services, including agricultural planning, production management, professional farmer training, brand building, and industrial fund co-construction, known as "5+2+N". The company has provided comprehensive solutions for rural revitalization to over 10 million farmers in 18 provinces, covering more than 100 million mu of arable land, and has served over ten cities, involving multiple stages from pre-production, production, to post-production.

"Digital Smart Agriculture" is the intelligent agricultural service business under Fengnong Holdings. It encompasses three major products: the DAP Management System for Smart Agriculture, the Smart Farm AI Pest and Disease Identification System, and the Smart Agricultural Service Information Sharing and Trading Platform (ASI-STs). This business effectively utilizes technologies such as the Internet of Things, big data, and artificial intelligence. It provides tailored, integrated, and full-process smart agricultural solutions for large-scale agricultural industrial parks, large farms, government and research institutions' experimental fields. This transformation allows agricultural management to shift from relying on nature and experience-based farming to making precise decisions based on real-time data, ultimately achieving high-quality, high-yield, precise, and efficient agricultural production.

Exhibits



Three Major Product Matrix Enhances Agricultural Production Efficiency Through Smart Technology

Smart Agriculture DAP Management System

The "Smart Agriculture DAP Management System" is a practical intelligent agriculture decision support system launched by Fengnong Holdings based on years of data and experience in agricultural services. It truly achieves a transition from human-driven to data-driven, from experience-based decision-making to artificial intelligence decision-making, and from uniform management to precise variable management. By leveraging digital technology and artificial intelligence, it assists farmers in achieving cost reduction, efficiency improvement, and increased production and income.

"Smart Agri" Pest and Disease AI Identification System

The "Smart Agri" Pest and Disease AI Identification System is an artificial intelligence diagnostic system for crop pests and diseases based on image recognition technology. Users can quickly identify and diagnose pest and disease, as well as nutrient deficiency problems, by capturing images of crop samples and using artificial intelligence recognition. The system also recommends corresponding solutions. Currently, "Smart Agri" can accurately identify over 500 common agricultural pests and diseases, as well as more than 1400 types of field weeds. It boasts an accuracy rate of 98% for citrus crop identification.

Agricultural Service Information Sharing and Trading Platform (ASI-STs)

The Agricultural Service Information Sharing and Trading Platform (ASI-STs) is a comprehensive platform that integrates the aggregation and sharing of supply and demand information for agricultural information release, agricultural production services, and agricultural supply and demand business. It also serves as the headquarters platform for modern agricultural service enterprises. By facilitating the entry of both agricultural service providers and seekers onto the same platform, along with the gathering and dissemination of information, as well as the sharing and trading of agricultural service business, it enhances the efficiency, accuracy, and timeliness in connecting the supply and demand sides of agricultural services. This platform enables swift and standardized management for the rapid accomplishment of agricultural service transactions, ultimately fostering the healthy development of modern agricultural service businesses.

Website <http://www.simae.cn>

Contact 13168726662

Industry Smart Agriculture

Introduction

The Shenzhen Institute of Modern Agricultural Equipment, established under the tripartite cooperation model of the national, provincial, and municipal levels, is a new research and development institution with the status of a public institution. It operates without a fixed organizational structure or designated staffing, and practices independent management. It is currently the sole modern agricultural equipment research and development institution in Shenzhen. Leveraging the advantages of Shenzhen's next-generation information technology, artificial intelligence, high-end equipment manufacturing, and talent resources, the institute aims to lead and revolutionize innovation. It focuses on the urgent need for the transformation of the national modern agricultural production methods and the enhancement of quality and efficiency. The institute is dedicated to solving the challenging convergence of agricultural machinery and agronomy, as well as agricultural machinery informatization in application areas like modern seed industry, smart agriculture, and food industry.

Exhibits



Agricultural Machinery Navigation and Intelligent Control Edge Computing Terminal (Codename: FarmBrain)

The Agricultural Machinery Navigation and Intelligent Control Edge Computing Terminal (Codename: FarmBrain) is designed for high-precision, all-terrain positioning and directional control of agricultural machinery. It employs various technologies including Beidou navigation, visual image positioning, laser ranging, inertial sensors, and UWB positioning, as well as multi-location information fusion. This enables the automatic driving of agricultural machinery, coupled with chassis control and environmental perception obstacle avoidance.

The FarmBrain is primarily used for the intelligent retrofitting of traditional agricultural machinery. By installing the FarmBrain, it enables independent navigation, remote control, and edge computing. Furthermore, operational records can be synchronized in real-time with the cloud-based Smart Agriculture System.

Technical specifications include RTK high-precision positioning navigation with an accuracy of 2.5cm. It also supports RTK+IMU high-precision combined navigation with an accuracy of 8cm, even under weak satellite signal conditions.

Debut Exhibit

Agricultural Machinery Navigation and Intelligent Control Edge Computing Terminal

Website /
Industry Digital Agriculture

Contact 15001303506

Introduction

The Shenzhen Digital Agriculture Association (SDAA) is jointly initiated and established by over 40 digital agriculture enterprises and institutions, including Fengnong Holdings, Shenzhen Unicom, UtechSmart, DC Agriculture, Seed Technology, Deltron Intelligent, Deepblue Agriculture, Northwest A&F University, among others. It is strongly supported and participated in by organizations such as Shen Nong Group, OCT Guangming, Shenzhen China Agricultural Network, and Shenzhen Institute of Genomics of Chinese Academy of Agricultural Sciences. SDAA brings together technological innovation service agencies, experts, and industry service enterprises from the entire agricultural industry chain and the digital agriculture technology chain. It serves as a self-disciplined organization, coordination mechanism, and representative body to promote the development of the digital agriculture industry in Shenzhen.

Based in Shenzhen and facing the whole country, SDAA actively promotes the integrated application of modern agricultural high-tech. It will play an important role in guiding and supporting the efficient development of Shenzhen's digital agricultural service industry, as well as in creating a pioneering demonstration zone for agricultural technology innovation and serving the national rural revitalization strategy.

Scope of operations:

1. Promote technological innovation in digital agriculture, assist members in establishing independent brands, and organize members to participate in the construction of modern digital agricultural parks and rural areas.
2. Promote the demonstration of agricultural technology, assist members in proposing industry policy suggestions to relevant departments at the provincial, municipal, and national levels, and reflect the intentions and requirements of members.
3. Establish platforms for policy and project docking services, technological innovation services, information services, and government-industry-university-research application exchange. Organize members to engage in exchanges and cooperation activities in the fields of digital agriculture and smart agriculture, both domestically and internationally.
4. Establish an intellectual property protection system for member units, safeguarding the legitimate rights and interests of members.
5. Organize members to participate in the formulation of national standards in the field of digital agriculture, and promote industry standardization.
6. Organize members to conduct professional education and training activities in digital agriculture. Training institutions should obtain a school license.

Exhibits

数字农业的关键技术

主要包括传感器技术、4G/5G无线网络技术、人工智能技术、大数据和云计算技术等。推进农业管理数字化和现代化，促进农业管理透明和透明，提高农业部门的行政效能。



数字产品制造业



Individuals and Teams (D01-D16)

Shingo Hisakawa

No. D01

Website <https://qninja.hisa.dev>

Contact shingohisakawa@gmail.com

Industry Healthcare; Education

Introduction

Shingo is a Japanese software/hardware engineer making PCR machines for a decade only with his wife. Their \$220 qPCR and \$45 qLAMP were chosen as the Top Technical Award Winner for the 2022 Amazing Maker Awards.

https://make.co/amazing-maker-awards/2022_winners_circle/

Exhibits



These are open-source cheap PCR machines. qPCR can detect most of the infectious diseases including covid. dPCR can monitor noncommunicable diseases (cancer, heart/kidney/pulmonary diseases, stroke, Alzheimer, diabetes) that caused 74% of global death.

We also bring 'Levistone', an IoT pendant that flashes when you can see the satellites including the China space station, SpaceX's Starlink trains, and others. With our Augmented Reality app, you can easily find and see them flying in the air with your naked eyes.

The Nekolympic

No. D02

Website <https://nekoma-seisakusho.com/nekolympic020.html>

Contact shimomura@nekoma-seisakusho.com

Industry Healthcare; Education

Introduction

Personal Projects

Exhibits



The Nekolympic is a project to create physical sports games, that is made by combination of Scratch, micro:bit, and exercise equipments. "Nekolympic" is a coined word of "ne-ko," and Olympics. ne-ko means a Cat in Japanese. Scratch can detect micro:bit movements via Scratchlink.

This project gives STEAM experiences to children, by creating their own sports games with Scratch and micro:bit. Through creating games, children think about the movements of their bodies, sensor functions, and the logic of the program.

Also it is an exercise that can be done indoors, and it can be enjoyed, by people of all ages and genders, even with some handicaps. Of course, it is important that the Nekolympic is very fun to play.

Alula_FPV

No. D03

Website <https://github.com/alula-fpv/Alula-Head-Tracker>

Contact maharjankishor9@gmail.com

Industry FPV drone

Introduction

FPV drone camera frame controlled by a tilting head sensor

Exhibits



Cameras on FPV drones are usually fixed. With Xiao Head tracker in addition to servomechanism connected camera on the drone, the camera can be tilted in one or multiple axes to get better cinematic video and angles.

Eun Kim

No. D04

Website <https://makemerry.co.kr>

Contact makemerry15@naver.com

Industry STEAM Education

Introduction

We live in Korea and make various educational kits with electronic circuits attached to paper.

We focus on interacting with educational institutions such as schools and science museums, encouraging STEAM education and bringing out student creativity.

Exhibits



Easy! Fun! No Soldering!

Understanding how circuits work is key to getting your start in the world of electronics. Our project developed for little makers helps you create your first circuit using a paper surface instead of a PCB. We hope enjoy make it and show your creativity.

Team Park Minsu

No. D05

Website <https://makerfaireminsupark.blogspot.com/>

Contact jfi02@naver.com

Industry IoT

Introduction

We are team Minsu Park. We attend NLCS Jeju as year 7 students. We like to create, share and experiment with projects that would make our daily lives much more convenient.

Exhibits



1. We have created a product that transforms an ordinary button fan into an IOT fan by attaching an Arduino temperature and humidity sensor and a relay. A relay, a temperature and humidity sensor, and an Arduino were attached to the fan circuit to make it change to light, medium, or strong wind according to a certain temperature. Also, the upgraded version will be equipped with Bluetooth. We are preparing a version that transmits temperature and humidity through the application and controls the fan wirelessly through a button that can be turned on or off until the maker faire.
2. We created a recycling machine that automatically separates plastic, cans, and paper using an AI camera. This method uses a teachable machine and Arduino to separate waste by moving a conveyor belt.



CombineReality

No. D06

Website <http://docs.projectnorthstar.org>

Contact noah@combinereality.com

Industry Education, Spatial Computing, XR, 3D Printing

Introduction

CombineReality was founded in 2019 by Noah Zerk in the United States. As a seasoned maker, Noah has been deeply involved in wearable technology for 15 years. With keen industry insights, he decided to focus on the open-source Project North Star as the core goal of the company. CombineReality is dedicated to the research, development, production, and sale of advanced XR wearable devices.

Over the past few years, our team has successfully undergone three rounds of product optimization iterations for the Project North Star, overcoming a series of technical challenges and applying multiple innovations to the latest version. The Project North Star headset has been adopted by numerous well-known overseas companies for various applications, including cloud server management, IoT, AR games, holographic office collaboration, medical applications, and education.

Exhibits



This next-generation AR headset is characterized by its open-source nature, powerful functionality, and modularity. It offers the best AR user experience available. Contributions from the project's open-source community continuously improve this product, and the technology is open to everyone. Anyone can have their own vision of the North Star headset.

Takahiro Okada

No. D07

Website <https://kapanitsa.github.io/Bondance/>

Contact okada.takahiro11@gmail.com

Industry Education, Entertainment

Introduction

Based in Tokyo, we are a creative team that excels in harnessing cutting-edge technology to give traditional culture a modern twist. This synergy results in the production of distinctive artworks that blend the old with the new.

Exhibits



"Generative AI Bon Dance" is an innovative digital installation where the magic of generative AI brings participants' photos and illustrations to life. We used multiple generative AI to generate music, lyrics, software and motion. It is combined to interactive hardware and instruments too!

Music laboratory

No. D08

Website <https://www.asahi-net.or.jp/~hb9t-ktd/music/English/Research/Robot/BuddyKun.html>

Contact katsuda@net.email.ne.jp

Industry Education

Introduction

Tetsuji Katsuda is a professional engineer for musical software also motor and Sensors. Living in Kyoto, Japan and makes robots, original electric musical instruments, and art works. Since 2016, he has exhibited overseas such as the United States, China, Singapore, India, Indonesia and Malaysia, and Rome.

Exhibits



Robot band is a robot orchestra composed of communication robots. The communication robot, "Buddy-kun" is a robot that talks with everyone, instructs and guides singing and gymnastics, and plays musical instruments in kindergartens and nursing homes. It takes advantage of AI and use speech recognition and speech synthesis to join the chat circle. You can get information about your daily life. It plays a leading role in

recreational activities. It can play musical instruments. Devices such as a 3D camera, microphone array, and speakers are connected to a small PC carried on the back. It has nine servo motors to move its head and arms. It can express emotions by devising the lighting pattern of the LEDs.

Website <https://omicro.tokyo/2022/07/17/omicro-balloid/>

Contact ichise@gmail.com

Industry Education

Introduction

Takuya Ichise, Japanese engineer, whose life's work has been creating the spherical robot "omicro". I have exhibited my work at Maker Faire around the world and have shown my work at Maker Faire BayArea, Singapore, Tokyo, Ogaki, Bangkok, Shenzhen, Prague, Kyoto, Tsukuba, Manila, Rangsit.

Exhibits



Omicro is a spherical robot. omicro balloid is a mixed reality app created to assist omicro, using LiDAR and computer vision libraries to create a digital twin in real time that reproduces physical objects and systems over real space. The application is a real-time creation of a digital twin. In this exhibition, events caused by an AI dog moving on the digital twin will be reflected on a spherical robot existing in real space.

Nico-Tech Shenzhen

No. D10-D11

Website https://wiki.nicotech.jp/nico_tech/?NTShenzhen2023

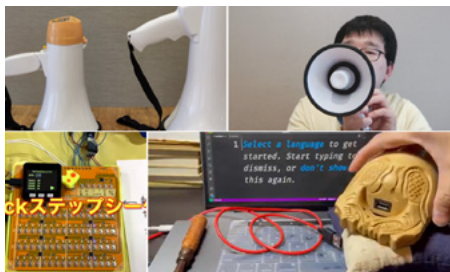
Contact takumasakazu@gmail.com

Industry Art, Science

Introduction

Nico-Tech Shenzhen is a Tech community. We are more than 3000 members on Facebook online, organised our events online/offline. We often collaborate with Shenzhen Tech-Startup/organisations, such as M5Stack, iMakerbase, GENESIS, Heroad, etc.

Exhibits



At MFSZ, we will bring a dozen makers from Japan, and you can see some tech-fun projects in our booth.

Project examples: Wonder Megaphone, M5Qspider(with M5Stack), Future Box(with micro:bit), Mechanical Step Sequencer, and Electronic Wooden Block.

Website http://ikkei.akiba.coocan.jp/ikkei_Electronics/treasure_c.html

Contact ikkei@zeus.eonet.ne.jp

Industry Entertainment

Introduction

I am an embedded engineer who works as a creator (named MaiaR create) after retiring from a major electronics manufacturer. I have created accessories and gadgets that light up with LEDs and exhibited them at Maker Faire in Tokyo, Kyoto, Shenzhen, and Taipei.

Exhibits



A treasure chest using an Arduino compatible 8bit microcontroller and full color LED. The excitement of opening the lid is expressed through a program that gradually becomes brighter and changes color. The exterior was made with a 3D printer.

ShigeLabo Tokyo

Website <https://twitter.com/ShigezoneAkiba/status/1696097816752632136>

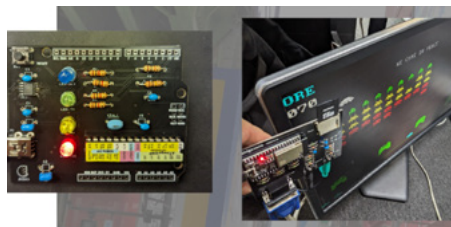
Contact shibuya.shigeta@gmail.com

Industry Education

Introduction

Maker team based on Akihabara, Tokyo

Exhibits



Retro PC emulation board

Website <http://www.airmama.in/>

Contact airmama.in@gmail.com

Industry Motorcycles, Electric Scooters, Air Filtration

Exhibits



Introducing AirMaMa - a global first! Featuring patented design! It's equipped with a 3M interface, allowing you to use 3M filters. A must-have for riders! No more worrying about a dirty face after riding. Whether it's raining or you're on the move, you won't feel uncomfortable. The power supply adopts an external design and is compatible with Xiaomi's 20,000mAh power bank. The filtering air volume is adjustable, and the air filter with a 3M filter can be attached to the motorcycle's handlebars or carried on your backpack. It can be worn for extended periods without discomfort.

Andrei Mironenko

Website <https://habr.com/ru/articles/192188/>

Contact belunix@gmail.com

Industry Energy, Telecommunication

Introduction

Shenzhen Maker Faire 2014 visitor, telco engineer, maker

Exhibits



Raspberry Pi based autonomous unit to help technicians and hobbyists with remote access to devices, sites, systems.

Debut Exhibit

Real-world scenarios of project usage will be demonstrated on the premises of the event. Visitors of the Maker Faire can interact with the installation. Internet access (WiFi or 4G) is required.

Website <http://www.powarSTEAM.com>
<https://www.hackster.io/powar-STEAM>
Industry STEAM Education

Contact pablo@powarSTEAM.com

Introduction

POWAR STEAM is a planet-centred R+D studio in educational innovation based in Barcelona, specializing in the design of methodologies, workshops, and learning objects for communities, schools, and homes. They assist in the conceptualization and implementation of small school and community innovation laboratories (SiLabs), aiming to empower individuals in the use of emerging digital manufacturing technologies such as 3D printing, code, and electronics. Additionally, they contribute to the establishment of school gardens for learning and research about food, its processes, and sustainability in pursuit of food security for all. The organization's mission is to empower individuals with the knowledge, skills, and tools necessary to navigate the challenges of the 21st century, ultimately striving for a planet-centred future accessible to all.

Exhibits



Their flagship project, POWAR, abbreviated for 'The Plant Observatory of Weather Adaptability for Resilience,' stands as a pioneering climate simulator. It grants users the ability to cultivate crops under projected future weather conditions, providing a valuable resource for education, experimentation, and research. Beyond its role as a STEAM educational tool, POWAR functions as a centralized data repository, aggregating insights from student experiments conducted globally.

This amassed data holds significant potential to benefit smallholder farmers, furnishing them with crucial information to make more informed decisions regarding the effects of climate change on their crops, ultimately bolstering their resilience. Furthermore, they are currently in the process of developing a citizen science tool named P-Bit. This innovative box incorporates an array of sensors, enabling children to conduct experiments within their immediate environments.

School of Intermedia Art, Guangzhou Academy of Fine Arts

No. E01-E02

Website	<p>About School of Intermedia Art, GAFA https://www.gzarts.edu.cn/jgsz/jxgj/kmtysxy.htm Online Graduation Show of School of Intermedia Art, GAFA https://www.t-gafa.com/</p>	Contact	dengbiwen2015@126.com
Industry	University-level Science and Technology Art Education, Artistic Creation, Public Art, Children's Science and Technology Art Education.		

Introduction

In order to implement the idea of "mutual complementarity and mutual promotion of fine arts, arts, science, and technology," Guangzhou Academy of Fine Arts (GAFA), located in the central area of the Guangdong-Hong Kong-Macao Greater Bay Area, is actively exploring new territories in art education. Faced with a new wave of technological revolution led by the Internet, big data, artificial intelligence, and 5G, GAFA is committed to building a space for the integration of art and science education, research, and disciplinary innovation, and is embarking on active and rational exploration. The current faculty is composed of graduates from domestic and foreign higher education institutions, specializing in various emerging fields such as intermedia, experimental art, fine arts, design, philosophy, sociology, psychology, film and television, drama, and stage art. Currently, 50% of the full-time teachers hold senior professional titles, 100% have master's degrees or above, and 50% hold doctoral degrees. The teacher's professional structure and age structure are reasonable, and they possess strong industry experience as well as teaching, artistic creation, and research abilities.

Exhibits



Project 1: Genetic Fusion - "Fundamentals of Interactive Mechanical Art" Course Exhibition

This project showcases the works of second-year students from the School of Intermedia Art at GAFA in 2021. Under the guidance of teachers and three graduate teaching assistants (Tan Ganquan, Zhang Junqi, and He Jiawei), 18 students present works with the theme of "genetic fusion." They cleverly combine elements such as multiple species, genes, fusion, legends, myths, and fantasy to demonstrate the marvelous integration of art and technology.

Project 2: Remaking Life - "Dynamic Paper Models" Course Exhibition

Leveraging the advantages of mechanical and electronic processing in the Pearl River Delta region, this course primarily focuses on computer-aided design of power mechanical devices. Through the study of computer software (Fusion360), students, either through self-selected cases or in conjunction with other courses, achieve the basic ability to independently create simple mechanical device design drawings (CAD, 3D printing). Common mechanical processing techniques are introduced. By learning, observing, and operating, students become familiar with knowledge of mechanical processing techniques and production principles. Under the supervision of the teacher, they attempt

simple operations, providing technical preparation for the production of interactive devices. In this course, second-year students observe and study animal characteristics in the South China region. They use origami to replicate animal movements and utilize Arduino as the basic interactive hardware to drive the paper-powered models.

Project 3: All Things - "Spiritual Resonance and Rule Collaboration in the Perspective of Technological Art" Course Exhibition

This exhibition is a phased presentation based on discussions with API teachers. It showcases physical and video works from 23 undergraduate students in the Experimental Art Department of the School of Intermedia Art at GAFA. The overall works present two directions in children's science and technology art education and creation. It involves disciplines such as art, mechanics, botany, architecture, optics, informatics, basic music theory, etc. Techniques include origami, basic interactive sensor programming, basic electronic sound programming, basic lighting programming, laser cutting, hand-drawing, 3D printing, Lego component assembly, etc. In the direction of children's science and technology art education, it attempts to guide teenagers to observe life, growth, cities, environments, and the laws governing all things more deeply and intuitively through different disciplines and technologies.

Website <http://design.sztu.edu.cn>

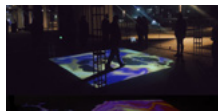
Contact design@sztu.edu.cn

Industry Art and Technology, New Media Art, Other Interdisciplinary Fields

Introduction

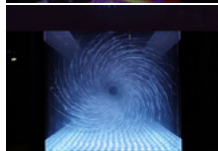
The School of Design and Innovation, rooted in the demands of Shenzhen and the nation for creative design talents, is oriented towards the future development of industries. It fully leverages the resource advantages of Shenzhen as the "City of Design" to cultivate top-notch applied creative design talents. The school places emphasis on cultivating students' practical abilities, strengthens cooperation between the university and enterprises, and integrates industry, academia, and research. Adhering to the educational philosophy of "derived from practice, oriented towards application, rooted in the local, and global in perspective", and following the principles of scientific rigor, emphasizing distinctive features, enriching content, and steady development, the school highlights the "artisan spirit". It focuses on a solid foundation and broad expertise, prioritizes practical training, and aims to develop high-quality design talents capable of adapting to the future era of digitization, internationalization, and artificial intelligence. The school strengthens the teaching system that emphasizes experiential practice, integrates learning with application, and encourages problem-based learning. It constructs a cross-disciplinary and mutually supportive professional teaching system. The school provides high-quality talent and human resources for Shenzhen's innovation-driven development strategy and industrial transformation and upgrading, and explores new paths for reform and innovation in higher design education nationwide.

Exhibits



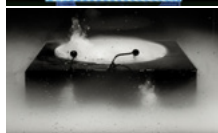
Project 1: Accidentally Disrupting Van Gogh's Dream

Legend has it that Van Gogh's inspiration for "The Starry Night" came from a peculiar dream. This work uses an EEG device to interact with visuals, allowing participants to create surreal dream images by standing still, walking, or running. Emotional changes lead to data variations collected by the EEG collector, triggering different images. The projector projects the images onto the floor, and an interactive radar device monitors the participant's position. The interaction system between the painting and the projected floor combines to change with movement.



Project 2: Touching the Black Hole

A black hole is a celestial body where the spacetime curvature is so great that even light cannot escape from its event horizon. Black holes are mysterious and highly devouring; even the fastest light, once near a black hole, will be attracted and devoured. The "Touching the Black Hole" art installation presents the mysterious process of a black hole's consumption in front of participants, allowing people to witness the formation and changes of the once-unreachable "black hole". It gives the immersees the experience of intense shock, detaching from everyday perception and hurling them into the unknown cosmic world, feeling the boundless and ever-changing charm of the universe.



Project 3: Pollutive Energy

"One button battery can pollute six hundred cubic meters of water" makes us think about the huge pollution caused by electronic products to water. The phone acts as a medium, effectively linking the phone with the button battery in the device. Participants interact with the phone to activate the mist. The longer the phone is used, the greater the pollution, and the more smoke there is. After a certain period, black mist is activated,

turning the color grayer. Placing a small button battery in a large acrylic space allows for a more intuitive perception of the continuous effects of small objects, which can also have immeasurable consequences. It serves as a warning to encourage people to use electronic products wisely and lighten the burden on nature.

Project 4: Electronic Pickles

The simulated action of picking up pickles is mimicked through image manipulation. When the ultrasonic sensor in front of the table detects someone, interaction occurs. Eating is something that only intimate or close people can do together. We urge everyone to put down their phones, spend more time with their family and friends, and communicate more. Don't let the phone devour our relationships.



Website <https://www.scfai.edu.cn/xmt/>

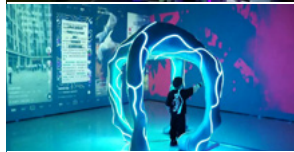
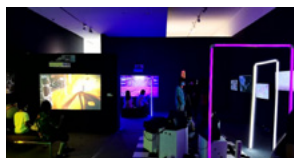
Contact zhanghaichao@scfai.edu.cn
zengzhen@scfai.edu.cn

Industry Interdisciplinary Field of Art and Technology

Introduction

Sichuan Fine Arts Institute, abbreviated as "SFAI," is located in the central municipality of Chongqing, with rich characteristics of Ba and Yu culture. It is one of the eight major art institutes in China and in 2021, it became authorized to grant doctoral degrees in design and fine arts. The institute was founded in 1940 and was renamed Sichuan Fine Arts Institute in 1959. In order to cultivate outstanding and innovative artistic talents, the school has established various channels for talent cultivation, such as "Outstanding Talent Cultivation," "Characteristics Studio Development," "Young Artist Residency," "Innovation and Entrepreneurship Education," etc., to support the growth and development of promising students.

Exhibits



Project 1: Technology & Art Teaching Cases from the New Media Art Department of SFAI

The Technology & Art Teaching and Research Office of the New Media Art Department at SFAI focuses on applying technological media to artistic creation. It implements innovative teaching methods based on the "Technology + Art + Application" model. With a focus on the digital era, the office integrates theoretical knowledge in areas like image circulation, virtual and real, and digital media aesthetics corresponding to the field of technology in experimental art creation. It deeply integrates this knowledge with cutting-edge technological means. In teaching, students are guided to use cutting-edge technologies such as computer-generated imagery, ARDUINO microcontroller development, physical transmission/lighting numerical control device development, 3D modeling/animation narrative, metaverse virtual space interaction, XR extended reality experience, 3D MAPPING+ digital audiovisuals as medium languages for creating contemporary artworks that align with the technological era. The project presentation showcases teaching and research case results from 2020 to the present.

Project 2: Intelligent Hardware and Interaction Design Teaching Cases from the Design Academy of SFAI

The Design Academy of SFAI is built on the foundation of the "Intelligent Design" discipline group, the "International College of Intelligent Design," and the "Industrial College of Intelligent Design" in Chongqing City. It integrates the core strengths of national first-class majors, inherits the aesthetics and skills of traditional art fields, and cross-integrates cutting-edge intelligent technology, exploring a unique path for the cultivation of interdisciplinary talents in art and science. The Information and Interaction Design Studio specializes in information design with a focus on large-capacity information, interaction design with a focus on human-machine relationships, and intelligent design driven by AI technology. It cultivates interdisciplinary knowledge in the fields of humanities, art, and science, and provides high-quality innovative design talents with an international perspective to serve the digital creative industry and intelligent design industry.

In 2021, the studio collaborated with B3Park (Chongqing Ruifan) to establish a joint training base for graduate students in Chongqing City, offering "Intelligent Hardware and Interaction Design" courses, and jointly establishing a laboratory with Seede Technology for continuous cooperation. They conducted cross-disciplinary teaching exploration on sustainable design, popular science art, intelligent interaction, and other topics, and the students' works won the first prize in the Huacan Awards national competition, as well as several provincial and national awards in the Digital Media Art Competition. These works have also been included in the IEEE Visap project and have applied for multiple patents.

About School of Design:

Website

<https://designschool.sustech.edu.cn/cn/about/team/faculty/377.html>

Contact

luot@sustech.edu.cn

Interaction Design Language: <http://ixdlanguage.org/>

Industry

AR/VR, Consumer Electronics (User Experience/ Interaction Design)

Introduction

I-I Group (Into Interaction) is a research team at the School of Design in SUSTECH, with a unique passion for interaction design at the undergraduate, master's, and doctoral levels. The team members have a keen interest in interactive innovation on various technical platforms. They apply Professor Luo Tao's research in interaction design to transform continuously advancing technology into delightful user experiences through refined, intricate, and elegant interaction forms.

Exhibits



Magic-Tap: Innovation in Virtual Hand Selection Technology in AR/VR Environments

This project explores the use of kinetics data generated by hand movements in designing and developing selection technology in a virtual environment. The inherent challenges of virtual hand selection technology in complex selection settings include "fragmented selection methods," "unexpected selections," "selection failures," and "slow selection."

To mitigate these problems, we introduced Magic-Tap, a real-time change-based object-triggering selection technology based on virtual hand acceleration and speed. It seamlessly integrates pointing and triggering processes without explicit triggering signals. Initially, we fine-tuned Magic-Tap's parameter settings through the first two experiments to improve its triggering rate, reduce error rates, and shorten the triggering time.

Furthermore, we compared Magic-Tap with two traditional virtual hand selection technologies (click and long-press) in the third experiment. The results showed that Magic-Tap's task completion time was comparable to that of Click, while its error rate was as low as that of Long-Press.

As a foundational innovation in triggering mechanisms in mixed reality, we believe that Magic-Tap represents a novel approach that leverages kinetics data to create intuitive and efficient selection interactions with excellent applicability in complex selection scenarios, including immersive virtual cockpits, interactive data visualization, on-site CAD, and more.

Website <https://www.sigs.tsinghua.edu.cn/ls/main.htm>

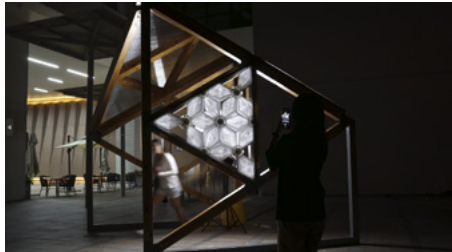
Contact shuai.lu@sz.tsinghua.edu.cn

Industry Construction

Introduction

Based on the intersection of architecture and many related disciplines in the new century, Future Human Habitats focuses on the cutting-edge problems of human settlement in the future, with design thinking as the core, for smarter and more sustainable built environment. Major support will be given to the 1+3 research structure, which includes one research center, Global Innovation Center on Design Thinking for Future Human Habitats, and three research fields: Future Urban Science and Supporting Technology System, Digital Architecture and Intelligent Construction, and Innovation Center for Humanity Technology of Future Human Habitats.

Exhibits



Project 1: Dancing Umbrella; Project 2: Have Fan

Both projects are intelligent pavilions that integrate Internet of Things technology, sensors, and control systems to respond to outdoor environmental factors and undergo morphological changes. These projects use data-driven decision-making to provide optimal user experiences in different weather conditions, which is an important trend in the future of smart buildings.

Website <https://gitee.com/bloomli/makerschool>

Contact bloomli@qq.com

Industry Higher Education, Vocational Education, Lifelong Learning, STEAM Education

Introduction

Southwest Jiaotong University's "Codes to Things: Making What You Think" is a national first-class undergraduate course teaching team. Established in 2014, the team is composed of teachers with backgrounds in disciplines such as computer science, engineering training, electronic information, design, and materials. It conducts maker education activities based on the Sino-US Youth Maker Exchange Center and the Intel-Southwest Jiaotong University Maker Center, and is the founding team of the Chengdu division of the Sino-US Youth Maker Competition.

In 2015, the team participated in the first batch of teaching capacity training sessions at Southwest Jiaotong University under the guidance of the renowned educator Professor Fan Yihong. They systematically studied teaching theories and methods such as "learner-centered," "holistic education," "multidimensional scholarship," "project-based learning," and "primacy teaching principles."

In 2016, the team launched the interdisciplinary general education course "Codes to Things: Making What You Think." After several iterations and reconstructions, the course was recognized as a national first-class undergraduate course by the Ministry of Education in 2020. In 2022, the course team joined the Ministry of Education's interdisciplinary course teaching innovation and reform virtual research room.

The head of the teaching team is Mr. Li Jun, the founder of the Maker Space at Southwest Jiaotong University.

Exhibits



2023教学内容和迭代关系



2022春 P1. 创客项目

"Codes to Things: Making What You Think" Maker Education Exchange

"Codes to Things: Making What You Think" is an interdisciplinary general education course at Southwest Jiaotong University, integrating computer science, electronic information, mechanical engineering, design, innovation, and maker spirit. Its aim is to cultivate the ability to innovate from scratch.

Through this course, typical students acquire the following skills:

1. Two-dimensional and three-dimensional modeling, as well as processing and manufacturing using 3D printing and laser cutting. They also learn circuit board design using EDA software and circuit board production using engraving machines.
2. Understanding of design thinking, the ability to organize teams for divergent and convergent thinking, and the effective proposal of alternative solutions based on research.
3. The ability to comprehensively apply the above technologies for prototyping these solutions, and to showcase their business models and application scenarios.

In 2020, the course was recognized as a national first-class undergraduate course by the Ministry of Education of the People's Republic of China. This exhibition looks forward to exchanging experiences with peers engaged in maker education and exploring the professional expertise of maker education.

Website /

Contact 1433977388@qq.com

Industry Education

Introduction

Dihuo Aurora is a team stemming from the Southwest Jiaotong University (SWJTU) maker community. The team is led by Teacher Zhang Bailin, who has been actively involved in the SWJTU maker circle. He was formerly a teacher at the SWJTU Maker Space and is currently engaged in teaching and management of information technology and innovation education in secondary schools. Since 2019, he has been involved in the establishment of three secondary schools. He has developed project-based STEAM teaching projects related to car manufacturing, soap making, wooden houses, and more. These initiatives have been featured twice on the Sichuan TV Science and Education Channel. The team is currently dedicated to the research and development of project-based STEAM teaching equipment and courses, particularly the creation of experiential, medium- to large-sized teaching equipment, teaching aids, and accompanying curricula.

Exhibits



Aurora Car

Aurora Car is an intelligent electric car kit that allows children to assemble and tune their very own electric car. Through this process, children can learn about the principles and engineering of automobiles, better understand automobile culture, and experience the fun of assembling and driving a car of their own.

The kits come in various versions such as the basic version, intelligent version, and maker version. Our goal is to provide an interdisciplinary project-based teaching platform that can truly meet the needs of educators. This kit can be used in a variety of forms of maker education activities and can serve as a summer camp experiential project. It can also be used for teaching various subjects such as mechanical design, vehicle engineering, electrical control, electronic information, computer programming, and artificial intelligence. We aim to build a teaching platform centered around the theme of cars that can truly meet the needs of teachers and support interdisciplinary project-based teaching.

Website <https://gtsi.edu.cn/>

Contact fandi@gatech.edu

Industry Intelligent Manufacturing, Maker Education

Introduction

Georgia Tech Shenzhen Institute (GTSI), Tianjin University, is a Sino-foreign joint educational institution jointly established by Tianjin University and the Georgia Institute of Technology in the United States with the support of the Shenzhen Municipal Government. The school officially received approval from the Ministry of Education on March 25th, 2020.

Exhibits



Fengmang Intelligent Manufacturing, Large Size



Ultra-Fast 3D Printer

<http://sisd.hit.edu.cn/>

Website WeChat Official Account: International Design Institute, Harbin Institute of Technology (Shenzhen)

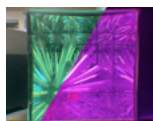
Contact 804064958@qq.com

Industry Higher Education, Design, New Media

Introduction

International Design Institute, Harbin Institute of Technology (Shenzhen) is a Sino-foreign cooperative educational institution jointly established by Harbin Institute of Technology and Zurich University of the Arts, which was approved by the Ministry of Education on November 11th, 2020. Although it is a non-independent legal entity, the institute operates with full educational authorization from the Chinese government. Leveraging the geographical and resource advantages of the Guangdong-Hong Kong-Macau Greater Bay Area, the institute focuses on the international academic frontiers, highlights the cross-disciplinary integration of "arts and technology" and "design and innovation," and supports multiple disciplines, in-depth cooperation between industry, academia and research, and collaboration with engineering strengths at Harbin Institute of Technology. The institute is committed to building a cross-disciplinary, cross-cultural, global-oriented, and future-facing design education institution, advocating scientific-technological innovation, embracing diversity, and becoming an important base for attracting top design talents in the Greater Bay Area.

Exhibits



Project 1: BAT - An Interactive Lighting Installation

It represents the emotional fluctuations of modern young people throughout the day and night. This speculative design project contrastingly portrays the tranquility of daylight and the frenzy of night through changes in lighting, providing viewers with a tangible sense of emotional transformation and sparking contemplation on the underlying causes.



Project 2: Destruction and Reconstruction - Sand and City

The city is submerged in sand that has been randomly dumped onto a conveyor belt by passersby. At the same time, the sand flows out through the holes at the bottom of the device. The installation consists of two parts and aims to universally convey the theme of destruction and reconstruction. The random placement of items by passersby destroys the installation, demonstrating the ease and universality of destruction.



Project 3: Imprisoned - An Interactive Art Maze that Explores Intergenerational Psychological Trauma in Families

This art maze aims to abstractly experience mental health problems in a game-like way and how they affect families across generations. Some people inadvertently harm their offspring due to their own psychological problems, while others intentionally overcompensate for their issues, resulting in further psychological problems for their offspring.



Project 4: Butterfly Habitat

The artist delves into the intersection between humans and nature, technology and art. Through abstract expression, he conveys profound emotions and philosophical thoughts. The artist uses the struggle of butterflies and the complexity of mechanical structure as symbols, and reflects the resistance of natural forces against machines through this unique artistic installation.



Project 5: Ru Yi - 3-in-1 Family Chair

This furniture design is themed around "New furniture for the new era". It combines functionality, cost and space efficiency, interaction and aesthetics into one. It adopts three design concepts of folding, modularization, and transformation, to create a new form of furniture that combines a chair, rocking chair, and table in one piece.



Project 6: Shadow Rhythm

Shadow Rhythm is an installation art that enables the performance of pop dancing with physical shadow models and from the motion capture of visitors and convert it into dynamic virtual shadow images.



Project 7: "Submerged" Candles

The "Submerged" series of eco-friendly candles is an expression of environmental activism in the form of three unique styles: City, Ocean, and Glacier. This series focuses on global warming and is not only a beautiful decorative item but also an artistic expression of the climate crisis affecting our planet.

Website <https://fablabxh.xhsysu.edu.cn/>

Contact 2868385262@qq.com

Industry Maker Education

Introduction

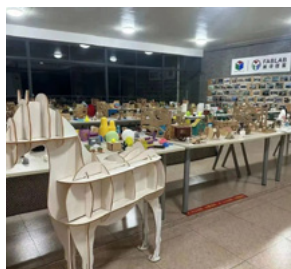
Guangzhou Xinhua University's FabLab Innovation Center adheres to the core principle of "digitalization" and the direction of "intelligence." It features a combination of theoretical teaching, on-campus/off-campus practice, research projects, and internationalized training. The center focuses on entrepreneurial education, cultivating young makers. Its subsidiary, Fab Lab XH was established in early 2015. It is a joint laboratory with the Massachusetts Institute of Technology (MIT) and the first FABLAB at a university in Guangdong province. It also serves as a global teaching point for MIT's FAB Academy. Fab Lab provides a technological prototyping platform for students to learn, innovate, and invent. In close collaboration with MIT, it stands as a benchmark in digital manufacturing and frontier research and development. It is the world's top-ranked maker space. Students can collaborate with over 2,000 labs worldwide, engaging in project research, sharing design outcomes, equipment, and knowledge. The lab employs a project-based teaching approach to impart modern management skills and knowledge in manufacturing fields such as electronics, 3D printing, 3D modeling, mechanics, and coding. Through the global Fab Lab network, students have access to knowledge in digital manufacturing and the best practice project resources from around the world.

Exhibits



Interdisciplinary Creative Design Challenge Course

This course is conducted in the form of interdisciplinary teams and primarily revolves around "understanding various materials and tools, how to use tools around us, and employing appropriate methods to create what we want to make." The course is divided into four main parts: project management, computer-aided design, digital equipment manufacturing, and innovative creative project production. The aim of the course is to cultivate students' ability for independent learning of knowledge and skills. Through team project production, it promotes emotional communication between students and teachers, students and students, and teachers and teachers, establishes the correct life values, and comprehensively enhances the overall quality and skills of teachers and students.



Fab Academy: FabLab XH is a teaching point for the Fab Academy of the Center for Bits and Atoms (CBA) at the Massachusetts Institute of Technology (MIT). It allows for student exchanges with other FABLABs both domestically and internationally. The Fab Academy primarily teaches students "How to make almost anything". The course includes 16 different field courses such as project management, Computer-Aided Design, Computer-controlled cutting, 3D scanning, and printing.

The FabLab Innovation Center's curriculum combines the new teaching model of MIT's Fab Academy. It establishes a teaching website (including an overview of the course, rules and regulations, student manual, course catalog, video resources, document resources, etc.). It offers five courses: Interdisciplinary Creative Design Challenge, Introduction to Digital Media Arts and Technology, Fundamentals and Applications of Digital Intelligent Manufacturing, 3D Additive Intelligent Manufacturing Technology and Digital Modeling, and Open Source Hardware and Programming. These

courses are open to the entire school, the Yat-sen Class, and students majoring in tourism management with a tourism maker direction. The program has been offered for 15 sessions, with a cumulative total of 1,300 participants. Its goal is to cultivate students with a solid foundation of theoretical knowledge and skills, analytical and problem-solving abilities, an international perspective, and international competitiveness.

Website <https://www.peihua.edu.cn/pgxyx/index.htm>

Contact maker@peihua.edu.cn

Industry Education, Telecommunication

Introduction

The maker center of Xi'an Peihua University is a multi-level innovation space at both city and provincial levels. It is located at 888 Changning Street, Chang'an District, Xi'an, an ancient city. The center features various functional areas and incubation platforms, including open creative labs, entrepreneurial nurseries, scientific and technological innovation labs, design innovation centers, training centers, and a new retail business school. It is equipped with industry-level electronic engineering labs, SMT production equipment, digital manufacturing equipment, etc., to serve Maker creators. Following a five-in-one innovation and entrepreneurship education system of "curriculum + faculty + platform + competition + practice", the center provides a full-chain service from creative inspiration, idea validation, technological realization, business counseling, entrepreneurial practice, to business incubation. This supports activities in cross-disciplinary cooperation and cross-domain innovation for college students, comprehensively promoting the training of applied talents. Each year, it initiates and cultivates 100 student innovation and entrepreneurship training program projects, with more than 80 patents filed cumulatively.

Exhibits



Project 1: High-Performance Industrial Short-Wave Infrared (SWIR) Camera

The showcased products at this MakerFaire include the Short-Wave Infrared Camera Series (SWIR) and the Video Compression/Decompression Series, which consist of both principle prototypes and engineering prototypes. The SWIR camera series possesses advantages such as high recognition, all-weather adaptability, low-light night vision, covert active imaging, and simple optical configuration. It can be widely applied in various industries including semiconductor, manufacturing and process, agriculture, scientific research and life sciences, automotive, military and defense, specific security, among others.

Project 2: PCB Creative Design

This project leverages the teaching and research resources of our school's JLC Joint Laboratory and Maker Center's open creative laboratory. By learning EDA software, parametric design tools, and digital manufacturing equipment, combined with professional knowledge of PCB design and production, we independently develop a batch of "engineering romantic" cultural and creative gifts. These include exquisitely designed cultural and creative products such as LED glowing brooches, bookmarks, rulers, keychains, and pencil holders based on printed circuit board design and production. It also includes practical DIY products like RFID campus cards, laser-engraved night lights, and ionizing radiation detectors. The above project works are mainly applied in primary, secondary, and high school maker practice education, gift customization, and other industries, enabling customization according to specific requirements.

Project 3: STEM Education Curriculum Support for Technological Innovation

This project is committed to providing multidimensional education for Chinese teenagers, using play to facilitate learning. It aims to make learning fun, engaging, and beneficial for both mental and physical development. Traditional labor skills and social maker education institutions often use standardized teaching tools, lacking uniqueness, leading to a high degree of project homogenization. This project offers curriculum development and material package development services in areas such as additive manufacturing/digital manufacturing, chemical experiments/physics experiments, electronic design/woodworking, embedded programming/robotics, etc. It has showcased projects like the Super Brain DIY Kit, Programmable Keyboard DIY Kit, LED Glowing School Emblem, Shibori Art Experience, and Architectural Model Experience at various MakerFaire events and domestic brand maker activities. The number of visitors to these exhibitions has exceeded 20,000.



Southwest Jiaotong University- ZeroLab Education Team

No. F01

Website /
Industry Education

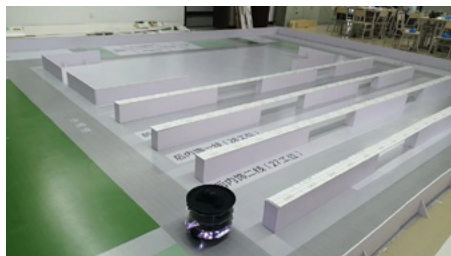
Contact 503358245@qq.com

Introduction

"Southwest Jiaotong University - ZeroLab Education Team, established in June 2021, emerged from a group of experienced educators in scientific and technological education, as well as STEAM education. The team was formed to address pain points in the current educational tools, with a focused dedication to the development of technology education aids.

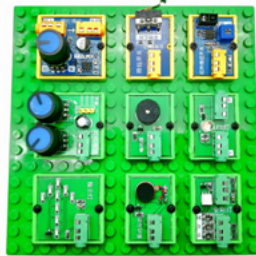
The team has independently developed a range of science and technology educational tools, including non-coding electronic building blocks, visual programming electronic building blocks, and AGV logistics training vehicles. ZeroLab Education Team consistently upholds the philosophy of popularizing and democratizing scientific and technological education, striving to provide the best user experience. Their mission is to create educational products that offer high cost-effectiveness, strong playability, broad functionality coverage, expandability, and user-friendly simplicity, and they are committed to continuous improvement in this pursuit."

Exhibits



Project 1: AGV Logistics Training Platform

The AGV Logistics Training Platform is an affordable experimental platform designed for secondary and higher vocational education, as well as undergraduate logistics education. It includes multiple AGV (Automated Guided Vehicle) cars, a set of maps, and AGVC training software. This platform allows educational institutions to save on expensive laboratory setup costs while enabling students to engage in practical operations, enriching their professional knowledge.



Project 2: MagicBit Non-Coding Electronic Building Blocks

MagicBit is a set of non-coding electronic building block kits that utilize audio interfaces for quick module connections. This not only enhances the reliability of module usage but also reduces module costs. It allows easy adoption even at a young age, greatly facilitating introductory learning in the field of science and technology education. MagicBit paves the way for the widespread adoption of science and technology education.

Website /

Contact 12333208@mail.sustech.edu.cn

Industry Education

Introduction

We are Immersive Design Group, a research group specialized in making, developing, and designing UX in the field of Human-Computer Interaction (HCI). We are in the School of Design at SUSTech (Shenzhen, China). We are interested in designing at the intersection of human and computer, hardware and software, virtual and real.

Exhibits



The wall display almost assumes a flat and static shape. a dynamic pin-array platform that can change different shapes to enrich users' kinesthetic experience. Our device achieves this by placing 64 pins on a 240mm x 240mm platform (The size of each pin is 30mm x 30mm), each pin can be extended by 100mm. By using the device, we can provide haptic feedback by physically manipulating the pins. For the average user, this can enhance their immersion in the pixelated world; For the visually impaired, this enables visually impaired users to access and interpret visual content. All in all, the device can improve the user's experience in the pixel painting world.

Taikoo Primary School (Hong Kong China)

No. F03

Website /

Contact lmhttps2019@gmail.com

Industry STEAM Education

Introduction

We are the champion of "Green Flame Project — Smart Energy Competition" organized by the Hong Kong and China Gas Co Ltd (Towngas) and Hong Kong Education City (HKEdCity). With 139 entries from 66 primary and secondary schools participating, we are honored to have won the overall championship, with HKD\$100,000 scholarship.

Exhibits



"AI ECO Train System" is an AI-powered green train system designed to address future smart city needs. This is an advanced concept to insert different technological elements into existing train systems, including solar panels, sensors and wind turbines, through the main control of Micro:bit. We expect this model can raise the awareness of energy-saving practices for transportation to the general public. "Taikoo Primary School Station" is an AI-powered green train system designed to address future smart city needs. The current Hong Kong train systems face three major problems: reliance on fossil fuel power generation, high energy consumption, and lack of greenery. To tackle these issues, we have conducted research and experiments in various areas, as to construct our model, AI ECO Train System.

Website /
Industry Education

Contact sschan@lst-lkkb.edu.hk

Introduction

We are a primary school from Tin Shui Wai, China Hong Kong, dedicated to promoting STEAM education and inspiring students to unleash their potential through creating various STEAM projects over the years. We have led students to participate in various competitions and overseas STEAM exchanges, including Maker Faire in Singapore, Taiwan, and Korea, the Bett Show in the UK. Our students have a passion for STEAM and creation. They have produced impressive works using AI, Micro:bit, IoT, etc, displaying exceptional programming and problem-solving skills.

Exhibits



This exhibition will showcase the innovative creations of our students using Micro:bit, including DIY crafts, upcycling projects and environmentally-friendly inventions, to raise awareness about sustainable technology.

Website / Contact 55383155@qq.com

Industry STEAM Education

Introduction

Chaisen: Founder of one sen Makers, one sen Makers is an innovative studio with independent capabilities in software and hardware development. Leveraging open-source hardware, they specialize in deep development and manufacturing in eight major domains: the Internet of Things (IoT), artificial intelligence, smart homes, robotics, new media interaction, smart agriculture, clean energy, and maker education.

Exhibits



Project 1: one sen

The intelligent music robots combine artificial intelligence with robot and software programming technologies, featuring three key technological advantages: intelligent performance, intelligent teaching, and new media interaction. They have wide-ranging applications in areas such as popular science education, musical instrument learning, artistic performances, music education, music composition, and entertainment services. Currently, there are intelligent African drum robots, intelligent bamboo flute robots, intelligent guitar robots, intelligent electronic keyboard robots, intelligent violin robots, intelligent aluminum plate xylophone robots, intelligent Chinese drum robots, intelligent flute robots, intelligent hang drum robots, and intelligent thumb piano robots, among others.

Project 2:one sen stem box

The Electronic Programming Science Kit has created a series of new projects aimed at teaching electronic programming skills, smart agriculture, smart home automation, and service robots. It allows you to expand your creative projects by combining new and more complex modules, with over 100 possibilities.

Debut Exhibit

An Integrated System for Smart Braille Display, Printing, Voice Output, and Learning (This all-in-one machine introduces an innovative approach, enabling more blind individuals to learn, perceive, print, and use Braille effectively.) This system combines: Smart Braille Printing System, Intelligent Braille Touch System, Smart Voice and Display System, Together, these components create a comprehensive solution for blind individuals, making Braille learning, reading, and communication more accessible and efficient.

Hong Kong Buddhist Ho Nam Kam College Robotics Development Team

No. F06

Website <https://www.bhnhkc.edu.hk>

Contact lcw@bhnhkc.edu.hk

Industry STEAM Education , Robotics

Introduction

Hong Kong Buddhist Ho Nam Kam College Robotics Development Team

Exhibits



Project 1: Humanoid Robot

Our humanoid robot is capable of performing combat, gymnastics, and dance movements. In April of this year, it participated in the prestigious ROBPGAMES competition in the United States, where it achieved remarkable results, winning 8 gold, 5 silver, and 4 bronze medals.



Project 2: Primary School Robotics Courses in Hong Kong

We have developed and published primary and upper-primary STEAM (Science, Technology, Engineering, Arts, and Mathematics) courses. Over the years, we have successfully promoted these courses in primary schools, with participation from more than 350 teachers and 12,000 students.

epis Education Centre Wakaba Shenzhen Classroom

No. F07

Website https://note.com/hajime_yamaya/m/m19c44c6c47f9

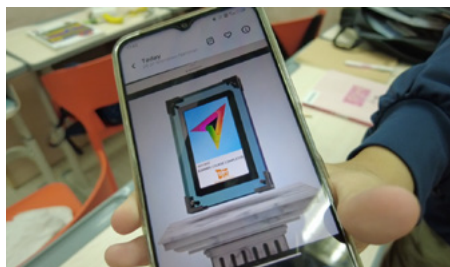
Contact yamaya@epis-edu.com

Industry Education, Blockchain, Web3

Introduction

epis Education Centre is a cram school founded in Hong Kong in 2002 that specializes in overseas children. In addition to Japanese schools, Hong Kong has international schools that follow the educational systems of various countries, and is home to many children from diverse backgrounds. For this reason, there are many cram schools in Hong Kong that support these overseas children, and Epis has cultivated know-how regarding the education of overseas children through friendly competition with these schools.

Exhibits



The primary objective is to enhance collaboration between educational institutions and to fully support the diverse learning and experiences of children.

The uniqueness of this platform lies in the blockchain-enabled NFT certification system. Upon completing a specific project, students are awarded an NFT, representing their achievement. Unlike traditional paper diplomas, a digital wallet (DID) can manage learning portfolios, allowing students to showcase their unique values and talents globally.

Shenzhen Zhongke Co-creation Education Research and Development Center - Maker Education Achievement Exhibition

No. F08

Website / **Contact** 335423737@qq.com
Industry Teenagers' Scientific and Technological Inventions; Science and Innovation Education into the Campus

Introduction

Shenzhen Zhongke Co-Innovation Education Research and Development Center is committed to the training of scientific literacy and science and innovation skills of young people, independent research and development of science and innovation courses, and cooperate with dozens of primary and secondary schools in Shenzhen to carry out artificial intelligence popularization course, science and technology association, maker training camp. Through the promotion of campus science and technology festivals, planning regional science and technology competitions, students' small projects and small papers, so that more students love science and dare to create.

Shenzhen Zhongke Tongchuang Education Research and Development Center, together with Shenzhen primary and secondary schools for many years to display campus science and technology invention works.

Exhibits

Project 1: Chinese Academy of Sciences Experimental School - Anti-Drunk Driving Device This project, an anti-drunk driving device, was selected as one of the five typical cases in Guangdong Province for Maker Education and received the Special Prize in Guangdong Province.

Project 2: Nanshan School of Science and Technology - 'City of Technology' Creation The project, 'City of Technology,' was awarded the Third Prize in the Greater Bay Area Smart City Science and Technology Innovation Competition and the Third Prize in the Global Invention Convention in Guangdong Province.

Project 3: Qingping Experimental School - Wearable Anti-Myopia Corrector The project, a wearable anti-myopia corrector, received the Third Prize in the Guangdong Provincial Youth Invention Award and the First Prize in the Shenzhen Technology Innovation Competition.

Project 4: Lequn Experimental Primary School - New Smart Library The project, a new smart library, received the First Prize in the Global Invention Convention in Guangdong Province.

Project 5: Nantou Primary School - Solar Self-Watering System This solar self-watering system project received the title of 'Young Scholar of the Chinese Academy of Sciences,' the First Prize in the Nanshan District Science and Technology Invention Competition, and funding from the municipal finance for project proposals. It was also granted a national utility model patent certificate (ZL 2018 2 2081611.X).

Project 6: Baimang Primary School - Programmable Electronic Piano The project, a programmable electronic piano, was selected as an outstanding maker project in Shenzhen's collection of excellent works by primary and secondary school students.

Debut Exhibit

Artificial intelligence learning Suite
Creative invention learning kit

Individuals and Teams (Specially Invited) (G01-G31)

Yushu Technology

No. G01

Website www.unitree.com

Contact 0571-56716562

Industry Science and Technology

Introduction

Founded in 2016, Yushu Technology is a national high-tech enterprise and a "Little Giant" enterprise specializing in national-level specialization and innovation. Yushu Technology is dedicated to the research and development, production, and sales of high-performance robots. Leveraging its independently developed core components, motion control algorithms, and robot perception systems, the company has established collaborations with several top universities and leading technology enterprises in the industry.

Currently, Yushu Technology's quadruped robots are integrated into over a hundred brands in various industries, including petrochemicals, security, power, education, and more, making use of the mature product solutions offered by Yushu Technology.

Exhibits



Four-Legged Robot, Go2

Yushu adheres to a philosophy of technology excellence and innovation, leading the way in the industry with the powerful Go2, the embodiment of a new intelligent species. The Go2 comes equipped with a proprietary 4D ultra-wide-angle laser radar, boasting a 360°*90° ultra-wide field of view and a 200% improvement in perception, achieving all-terrain awareness. Empowered by the GPT large model, the Go2 gains a better understanding of the world and makes informed decisions. The motion control system has undergone a robust upgrade, with joint peak torque increased to 45N·m, internal wiring added, and a knee joint motor area featuring an auxiliary cooling system with a heat pipe, resulting in a 30% performance boost. This enhancement allows the Go2 to execute a variety of dynamic poses, including jumping, stretching, handshaking, diving, and sitting. The Go2 utilizes the ISS2.0 intelligent companion system, which employs cutting-edge infinite vector positioning and machine control technology. This leads to a 50% improvement in positioning accuracy and a remote control range exceeding 30 meters. Coupled with optimized obstacle avoidance strategies, the Go2 thrives in complex environments. The accompanying app offers intelligent interaction and the potential to integrate even more high-tech configurations, enabling users to explore the limits of technology.

Kenqing Technology Exoskeleton Robot R&D Team

No. G02

Website <http://www.kenqingkeji.com>

Contact WeChat: 18027667017

Industry Healthcare and Rehabilitation; Outdoor Activities and Sports, Logistics and Material Handling, Industrial Settings, Power Industry, Firefighting, Emergency Response, and Disaster Relief

Introduction

Kenqing Technology Exoskeleton Robot R&D Team was founded in March 2015 and is recognized as a national high-tech enterprise. Since its inception, the team has been dedicated to the research, development, and manufacturing of motion-enhancing exoskeleton robot products. They have acquired profound expertise in various domains, including human biomechanics, ergonomics, biomimetic machinery, motion intention recognition, servo drive control, sensor-integrated motion perception systems, and self-learning motion-enhancing AI algorithms. The team has applied for more than 50 patents and, as of August 2023, has been granted 23 invention patents, 6 utility model patents, and over 10 design patents.

Exhibits



Project 1: Ant-H1 Pro Walking Assistance Robot

The Ant-H1 Pro walking assistance robot is a culmination of advanced technologies in biomechanics, power, electronics, and AI algorithms. It excels in perceiving subtle movements in the lower limbs and provides real-time power assistance, making walking easier for users. Its reverse resistance mode allows precise core muscle training during walking, enhancing physical fitness.



Project 2: Assistance Robot Ant-W1

The Ant-W1 waist assistance robot is designed to assist with waist-level lifting tasks. Equipped with a sensor network to detect human body movements and an integrated microprocessor to analyze movement intent, this robot employs a digital servo system to apply stretching torque to both sides of the user's torso and waist, reducing the muscular strain on the lower back and waist when lifting heavy objects or bending.



Project 3: Arm-assisted Robot Ant-A1

The Ant-A1 senses the load weight through the learning algorithm, and automatically distributes the power of the left and right arms, so that the wearer can flexibly manipulate the load, achieve horizontal lift, rotation, push and pull actions, and meet the diverse needs of on-load operations.

Debut Exhibit

Arm-assisted Robot Ant-A1

Website ember.top

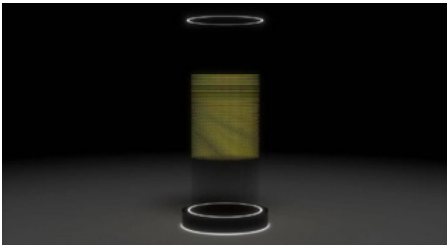
Contact WeChat: qq348042432

Industry New Media Art

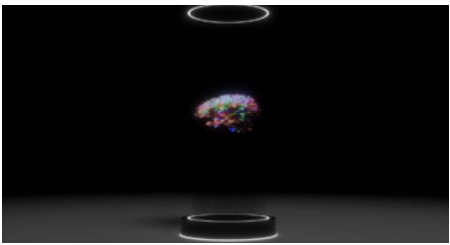
Introduction

EMBER is a creative laboratory with a core focus on cross-media art. Driven by a passion for cross-media art and a pursuit of sensory expression, our team unites artists, technicians, designers, and curators. We employ a diverse range of cross-media materials such as installations, machinery, visual imagery, and sensory devices, using an artistic curatorial approach to translate and transform businesses and brands. With over eight years of technical expertise, our global network of artist partners excels in the transformation of brand essence through the techniques of art installation and art curation.

Exhibits



LED stereo display carrier device



Website

/

Contact

Tel/WeChat: 15727759086

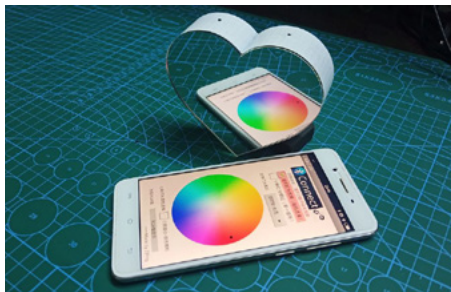
Industry

Mechanical Design, Science and Technology Education, Creative Display

Introduction

Chen Ziping, a teacher of Xunwu Vocational School and a senior maker, has guided students to win more than 10 provincial and national honors, and has been awarded the titles of "the most beautiful scientific and technological worker" and "Municipal Technical expert". He likes to make some projects that he is interested in, and he is keen on mechanical design, electronic production, Arduino, ESP32, Raspberry PI programming, etc., and has obtained 5 national patents. I hope to get to know more colleagues who love to create through project sharing.

Exhibits



Project 1: Cardiac signal

This device is designed with a double-sided mirror and a heartbeat detection sensor on the back, which can detect the heartbeat frequency in real time. An APP is developed to display various colors of light effects.



Project 2: The eighth generation of space vehicle

The eighth national finals of the Science Popularization Innovation Competition, the production process after eight iterations of upgrading, dozens of structural modifications, the overall use of synchronous wheel structure, trigger two-stage lifting, the use of ratches can achieve 90 degrees of vertical climbing.



Project 3: MHD Bluetooth Speaker

Self-made MHD Bluetooth speaker, built-in a variety of lighting modes, through the fast FFT algorithm to adapt to the song frequency, can watch the spectrum range in real time, the MHD follows the frequency changes and beats.

Project 4: Light Edge Gold Armor (Mechanical insect)

Under production...

Debut Exhibit

Light Edge Gold Armor (Mechanical insect)

Website worldshare.com.cn

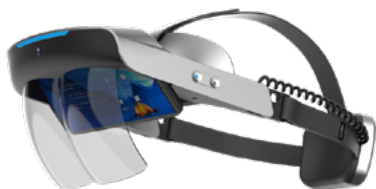
Contact WeChat: AWESOME_JIE

Industry Science and Innovation Education, Mixed Reality Content Development

Introduction

We are a technology-driven student startup team from Tsinghua University. The core members have rich experience in electronic research and development, algorithm design, software development and product design; He has won awards in RoboMaster, National IoT Design Competition, Venice Biennale, iF Product Design Competition and other fields. We are committed to creating full-stack hard technology products that are more suitable for mixed reality development, reducing the difficulty of development and helping the popularization of mixed reality technology.

Exhibits



Circlet

Circlet is a mixed-reality interactive content developer offering a full-stack mixed reality solution from hardware to operating system drivers to application software development platforms. The application development of mixed reality is often accompanied by a variety of sensor data collection, and interaction design is carried out on the basis of sensor data. The product is equipped with a magnetic expansion interface on the side of the body, and provides a rich sensor product matrix, and users can realize positioning enhancement and AI computing power enhancement with the help of supporting peripherals; Under the condition of unified interface,

the sensor can realize diversified functions, plug and play; Users can directly on the headset for data acquisition, algorithm debugging, effect verification closed-loop development link.

The data no longer passes through the PC, and the whole process is simpler. In addition, the product focuses on the interaction design of user input, and provides a variety of interaction methods including remote control ring, touch sticker, gesture recognition, and voice translation. Remote control ring and touch sticker interactive devices respond quickly, avoid body movements, and are more suitable for use in crowded announcement places such as subways and elevators. Voice and gesture interaction is closer to people's control intuition, and we increase the recognition accuracy through algorithm optimization, so that users can use it in suitable scenes such as rooms and studios. Circlet has a variety of user input methods, covering the whole scene of life. The electronic part of the antenna introduced MIMO design, adaptive extended AI computing power box, is a hardware from the bottom design, can achieve AI enabled augmented reality development equipment. In the context of the large model era, it helps developers to carry out more creative virtual reality programming. Worldshare is committed to lowering the hardware threshold for AR entry, and enabling the popularization of mixed rea.

Maker: Jianshan

No. G06

Website <https://www.jianshu.com/u/45d8f935d361>

Contact WeChat: swortain

Industry Interactive Devices, Digital Ornaments

Introduction

Jian Shan, a personal maker, has been engaged in maker related work since 2014. He has been a maker mentor and co-founded an interactive device studio

Exhibits



Project 1: LED Matrix Display and Socket Controlled by TouchDesigner

This project involves LED matrix screens and sockets that can be controlled using TouchDesigner. The control module allows for interactive management of the LED displays and sockets.

Project 2: Cyber-Matrix

This module is built using LED matrix displays and features various transition effects while displaying the current time.

Project 3: Lifespan (Work in Progress)

An installation that aims to accurately display one's age down to the millisecond. Please note that this project is subject to completion and may not be guaranteed.

Kemeng Robot

No. G07

Website /

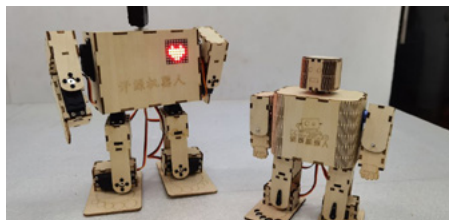
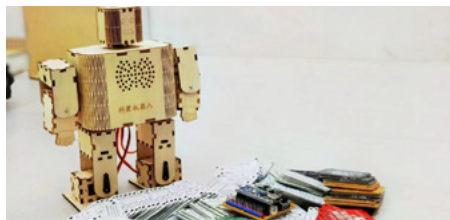
Contact WeChat: why250732415

Industry STEAM Education

Introduction

Kemon Robotics Wang Hongyan, depth of creativity enthusiasts, specializing in the use of laser cutting combined with open-source hardware to create interesting science and education works, in the domestic science and innovation competitions with students won numerous awards, I am also looking for the lowest price, so that the public can easily and effectively play up the creativity to create things, so that more young people let their imagination fly out of the bar.

Exhibits



Through laser cutting design, combined with arduino and steering engine, I can design a pedestrian robot by myself, and the control end has a handle remote control and voice recognition control, enriching science and innovation courses for primary and middle school students

[Website](#)

/

[Contact](#)

WeChat: alafaoumiga

[Industry](#)

Music Performance, Science and Innovation Teaching

Introduction

Yu Hongfeng, a veteran maker, Engaged in maker education for 13 years, founder of Xunguang Maker space, co-founder of Shenzhen Youth Maker Base, co-founder of IDE3 Advantage Education, invited writer of "Falling in Love with Robots" magazine, obtained a number of national qualifications and certificates, Firewood maker space empowerment training special lecturer, OSROBOT China Open source Robot Alliance co-promoter Shenzhen, a number of primary and middle schools specially engaged science and technology tutoring teachers have been deeply cultivating maker education for more than ten years, adhering to the educational concept of "finding a bright spot for children is enough", and have led students inside and outside the school to win the first prize and special prize of major innovation contests & science and technology competitions for many times.

Exhibits



Project 1: Band Fairy

The Band Fairy is a multi-track circulator with metronome, tape recorder and effect device as its main functions. Features include tuner, standard pitch output, tuning follow, and tuning for twelve-tone instruments. It can help musicians to improvise and arrange music, and is also suitable for personal practice and rehearsal. Band Fairy is suitable for musicians of all levels, making it easy to practice, perform and record individually. With high-quality recording and sound processing functions, you can help musicians create more and better music effects. A variety of built-in metronomes and sound effects for musicians to improvise and arrange music. Whether it is personal practice or band performance, it can be easily used, so that your music creation is simpler and easier, and challenge the higher musical realm!



Project 2: Smart Farming

Smart Farming Dear flower lovers, have you ever experienced the pain of not being able to water properly and watching your beloved flowers die? Have you always wanted to learn about the habits of plants, but couldn't find the right way to care for them? Do you want to plant your own vegetables and realize the freedom of fresh vegetables? Don't worry! Now, we bring you a piece of your own "smart farm", so that you can easily master the growth of flowers and plants secrets! This is an automated integrated equipment, through the use of a series of sensors and controllers to work together, can provide plants required by the appropriate light, temperature, humidity and water and other natural conditions, to help people complete the scientific cultivation of vegetables, flowers and plants.

Website <https://techxartisan.com/>

Contact WeChat: haoqiabin, 13211065345

Industry New Media Art, Science and Technology Exhibition, sScience and Technology Art Education

Introduction

TechxArtisan is made up of designers, makers, technologists, curators and innovators who are passionate about the art of technology, creating one-of-a-kind experiences and installations for commercial, exhibition and public Spaces.

Exhibits



Project 1: Mechanical Dog Alex

TechxArtisan is made up of designers, makers, technologists, curators and innovators who are passionate about the art of technology, creating one-of-a-kind experiences and installations for commercial, exhibition and public Spaces.

Project 2: Matrix mechanical flower

Matrix mechanical flower uses N20 motor to drive the opening and closing flowers, there is a ring RGB lamp in the flower, 20-30 mechanical flowers connected to the main controller through WiFi, through the main controller can individually or fully control the opening and closing of mechanical flowers and lighting effects, send customized arranged instructions can show their desired effect pattern, The installation can be used for new media art, interactive art, cultural travel projects.



Project 3: Light Controller

The light controller adopts the ESP8266/32 main control made of the light controller, the characteristics are that the board has been equipped with level conversion, RS485 and digital microphone chip, support DMX512 protocol, can control DMX light and shaking head light and other equipment, support music rhythm, with WLED firmware can support WS281X series. SK 6812LED or SPI-based chipset, such as WS 2801 and APA 102 and other most of the light strips on the market, WS2812FX library and Fast LED integrated more than 100 lighting effects. It is used for lighting display projects or exhibition installations.



Southwest Jiaotong University Team

“Zao Yi Ge”

No. G10

Website www.railworkschina.com store.railworkschina.com yun.railworkschina.com

Contact WeChat: baimin-piu

Industry Integrated Simulation Driving

Introduction

"Zao Yi Ge" is a team from Southwest Jiaotong University's maker community. The team leader is Mr. Li Jun, who works in the School of Computer and Artificial Intelligence of Southwest Jiaotong University. He is the co-founder of Jiaoda Zao Wu Network, the co-founder of Fablab Chengdu, and the main organizer of the Chengdu Branch of China-US Young Maker Competition. The national level course "From Code to Object: Build What You Want" is widely loved by students in the school.

Exhibits



Bring the real train driving experience to life in the first person and experience classic Chinese locomotive types and the best Chinese railway routes. Bring you the experience of driving powerful and authentic trains on some of the best railways in China. Use real-world data to accurately replicate the performance, sound, and feel of a real train. Complete the start-up task of simulated driving, run according to the 24-hour schedule, relax like a passenger or watch the train go by, whether you are a novice or an experienced expert, I believe it will bring you a rich experience.

Website

/

Contact

WeChat: 15816023959

Industry

STEAM Education

Exhibits



Project 1: A Racing Car Based on Concentration and Relaxation

This is a racing car that detects the wearer's brainwaves using EEG (Electroencephalogram) equipment, employing cutting-edge EEG technology to measure the fluctuations of the wearer's brain neurons, including various psychological parameters such as concentration and relaxation. It visualizes the wearer's level of concentration and relaxation using a thought-controlled racing car. According to a unique algorithm, it measures two parameters: attention concentration and relaxation. The more focused the wearer's attention, the faster the car moves. When two people compete, the first one to complete the specified number of laps wins.



Project 2: Artificial Lightning Machine (Tesla Coil)

A Tesla coil, also known as a Tesla coil transformer, is a high-frequency, high-voltage transformer invented by Nikola Tesla. It primarily consists of two coupled coils: the primary coil and the secondary coil. The primary coil is a low-voltage secondary coil made up of a small number of turns of thick wire, typically connected to a high-frequency power amplifier. The secondary coil is located inside the primary coil and consists of more turns but thinner wire, achieving energy transfer through electromagnetic coupling. Tesla coils, as high-frequency, high-voltage devices, exhibit unique electromagnetic field effects and have a wide range of applications in education, entertainment, and wireless energy transmission.

Maker: Zhong Jiajun

No. G12

Website

/

Contact

WeChat: a429284390

Industry

Traditional Culture Industry

Introduction

It is committed to making cultural and creative products with the characteristics of new tide and creating a young and energetic lion dance team

Exhibits



Project 1: New Wave National Lion

Head can be used for decoration and performance activities.

Project 2: New Wave National

Culture shirt is used for wearing and decoration.

SZDIY

No. G13

Website

<https://szdiy.org/>

Contact

WeChat: df4vhehe

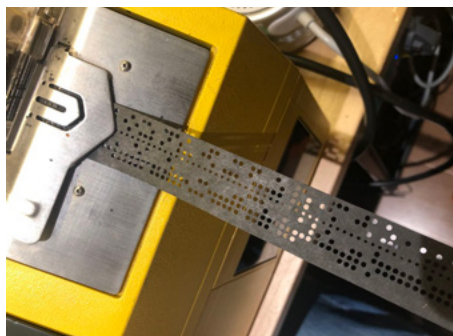
Industry

maker

Introduction

Shenzhen Wild Maker Space (SZDIY) is a local community for open-source hardware and software enthusiasts in Shenzhen.

Exhibits



Punch paper tape machine

Website <https://pi-cast.com>

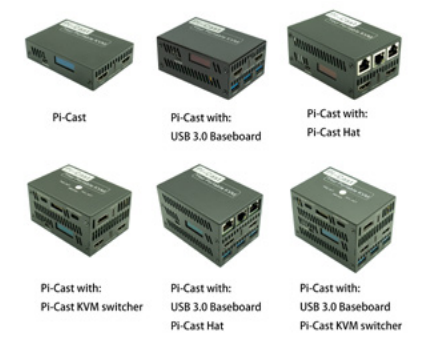
Contact WeChat: zorro668

Industry Data Operations, Homelab

Introduction

I am a dedicated maker specializing in open-source remote management hardware devices. For the past eight years, I have been responsible for the development of mobile security software at Tencent. In January of this year, fueled by a deep passion and enthusiasm for open-source hardware, I made the decision to resign and dedicate myself to my own venture in open-source remote management hardware projects. I have already completed both the hardware and software development, and I am currently in discussions with overseas crowdfunding platforms to initiate a crowdfunding campaign.

Exhibits



Pi-Cast KVM

Pi-Cast is a portable IP-KVM (Keyboard, Video, Mouse) device that enables remote control of a computer through its HDMI and USB interfaces. In comparison to remote desktop software installed on the computer, it provides a lower-level control, including the ability to modify the BIOS, install an operating system, and manage the computer even when there is no operating system installed.

Website <https://space.bilibili.com/358732547>

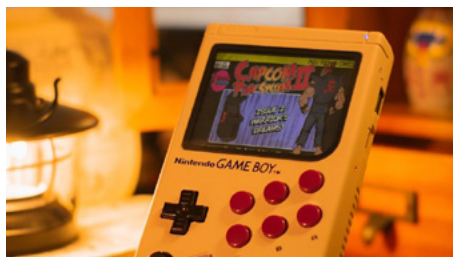
Contact WeChat: lldiy

Industry Entertainment Electronics

Introduction

LCL Li, a tech blogger who loves creativity

Exhibits



Project 1: Raspberry pi Game boy

A classic Nintendo Game Boy design, this device retains the cartridge-swapping and battery-replacement features. Powered by the robust CM4, it can run emulators and play over 40 console types, tens of thousands of retro games, and even classic DOS games. Perfect for nostalgic gaming enthusiasts.



Project 2: Palmtop

A compact palmtop computer with a retro design that combines a keyboard, display, and Raspberry Pi. It fully leverages the Raspberry Pi's performance, making it as portable as a smartphone, fitting in your pocket. It is compatible with operating systems like Raspbian, Ubuntu MATE, Kali Linux, and soon-to-be RetroPie gaming system.



Project 3: Mini motorcycle game machine

Experience the thrill of riding a motorcycle right on your desktop with this mini motorcycle game machine powered by Raspberry Pi 4's impressive performance. It simulates the feel of large arcade motorcycle games in a perfectly downsized form. When you're tired of work, enjoy the excitement of motorcycle racing on your desk.



Project 4: Mini racing arcade, racing game on the desktop

Website abidao.xyz

Contact WeChat: 13332926520

Industry Hotel Retail Service Industry

Introduction

Formerly known as Abi Hackerspace, AbiDAO is a longstanding offline tech enthusiast community in the Shenzhen area. We've had our own gatherings for a long time, adhering to the principles of tacit approval, self-initiative, and actions speaking louder than words.

Exhibits



Holographic Natural Language Conversational Digital Being

Website

/

Contact

WeChat: whaleforest

Industry

Design and Consulting

Introduction

Gao Lei, a master's graduate in Human-Computer Interaction from Keio University's Media Research Institute in Japan, is known for spearheading the popularization of open-source hardware Arduino in China. He has a long-standing commitment to assisting businesses in cost-effective development of innovative products through lean startup methods. Lei has been invited to share his insights at events like the China Software Architecture Conference, Maker Faire, One Foundation, TEDx, and Youth Ambitions. His entrepreneurial ventures have secured tens of millions in funding

Exhibits

【产品与市场匹配小组 Product Market Fit Team】



为探索新市场的企业
搭建产品与市场匹配小组
助力企业及时、高精度、低成本
进行产品与市场的匹配验证
让关键决策做得对、产品卖得好

商业服务设计

Product Market Fit Team

Project Description: In an era characterized by economic downturn, rising unemployment, and a collective exploration of transformation, the Product Market Fit Team project seeks to explore new production relationships. On one hand, it connects entrepreneurs who have a pressing need for professional talents to bring their business visions to fruition and innovators within established companies. On the other hand, it connects individuals with professional expertise who wish to make an impact outside their traditional corporate roles and explore their future potential.

This project merges these two groups through the vital scenario of "product-market fit" to support collaboration, with the aim of addressing high-value problems and creating a new form of production relationship.

Objective: "For businesses exploring new markets, establish a Product Market Fit Team to assist in prompt, precise, and cost-effective validation of product-market fit. This ensures that key decisions are well-informed and products perform effectively in the market."

Functions: At its current stage, the Product Market Fit Team comprises industry experts and performs the following tasks:

1. Assemble small teams to assist businesses in resolving Product Market Fit issues.
2. Incorporate problem-solving methods and data into the Product Market Fit model.
3. Empower internal company teams to continuously maintain the Product Market Fit model and use it to address issues.
4. Professionals engaged in this service gain trust and establish flexible professional partnerships with the clients.

Plan: Currently in the manual prototyping phase, the project envisions leveraging AI models and building an expert community in the future to enhance efficiency and expand its service capacity. This would allow businesses of any size to access such services at a low cost, thus turning their visions and creativity into reality and contributing to the diverse needs of society.

Website

/

Contact

WeChat: wjq_wang626

Industry

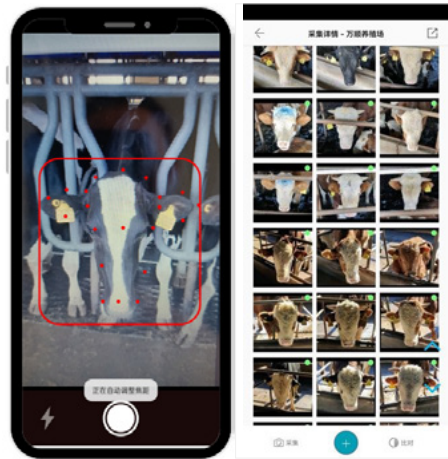
Aquaculture Industry

Introduction

The team is led by Zhang Hailong, who has 3 years of work experience at renowned tech companies. Due to his unique business experiences and vision, he founded the team in October 2021. Currently, the team has applied for two national invention patents and secured two software copyrights. The core team member, Yang Xiaosu, is the first inventor on all these intellectual properties.

The team plans to register a company in 2024. Their collaborative research focuses on facial recognition technology, which they aim to apply initially in the insurance industry for data collection and matching during underwriting and claims processing. This is an area of high urgency and demand within the industry, with strong willingness to pay. In the future, they also plan to expand into the market, and the estimated market size for the digital future of the industry is expected to reach billions of dollars.

Exhibits



Cattle Facial Recognition Technology

Artificial Intelligence is a branch of computer science that seeks to understand the essence of intelligence. Research in this field includes robotics, speech recognition, image recognition, natural language processing, and expert systems. Since its inception, the field of Artificial Intelligence has continuously expanded its applications.

We apply Artificial Intelligence image recognition to the livestock industry for the purpose of identifying and analyzing the behavior of cattle. Our product enables the representation of all collected cattle in a digital code format on the server, assigning unique IDs to individual cattle. It conducts facial analysis of collected cattle to determine standard postures in images. Even in cases where multiple cattle appear in a single frame, our technology accurately identifies and distinguishes individual cattle without the problem of recognizing multiple cattle as a single entity.

Compared to existing three-face recognition technologies in the market, our system reduces the time required for capturing a single cattle's image from 10 seconds to just

3 seconds. We employ a novel, self-developed Adaptive Closed-Set Feature Clustering Technology (H Ada-Set-Cluster) with internal ID feature interpretability. This ensures the differentiation of different IDs within the cluster and provides feature visualization at a Human Visibility level.

The product offers multiple application scenarios, including an offline mode that effectively resolves signal issues in remote areas. In cases of a large number of cattle, multiple individuals can collaborate to increase data collection efficiency. Additionally, remote verification allows farmers to assess cattle IDs directly through an app, enabling pre-claims assessment by the farmers. If no claims are necessary, on-site visits are not required.

These product features perfectly address the three major challenges of risk management, data collection efficiency, and accuracy.

Website /
Industry Toy Sales

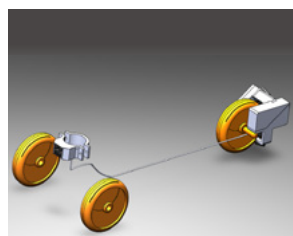
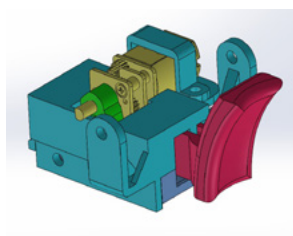
Contact WeChat: cjl2079953352

Introduction

The Jia Chuang Team is dedicated to the motto of "Safety First, Happy Riding" and is committed to providing children with the safest and most joyful scooter riding experience. We firmly believe that through continuous innovation and refinement, we can offer children even safer and more enjoyable riding experiences. Our team members possess extensive expertise in mechanical design, automation control, and child product development.

In the field of children's scooter brakes, we have unique professional knowledge and skills, prioritizing product performance and safety. We strive to provide outstanding scooter brakes for children. We uphold the highest standards, maintain rigorous requirements, and relentlessly pursue excellence, all to create safe and reliable scooter brakes for kids.

Exhibits



Automatic Braking System for Children's Scooters

The design of an automatic braking system for children's scooters is a modular, detachable, and intelligent device aimed at enhancing the safety and control of children while riding scooters. This device, equipped with various sensors and microcontroller algorithms, continuously monitors the scooter's speed, obstacles ahead, slopes, and prevention of rear-wheel sliding. In complex situations, it activates the braking mechanism to ensure that the children's scooter can come to a safe stop or slow down.

External Installation: This product is available in two design concepts. The first is the "External Installation" approach. In this method, all the mechanical components, including the battery, are housed in an external box that is mounted on the scooter's body. This design is particularly suitable for achieving modular equipment. It allows many scooters without this feature to easily install the product in a modular fashion. Therefore, "External Installation" is more suitable for modular use and can be sold as a standalone product.

Embedded Installation: The second approach is the "Embedded Installation." In this method, the installation is completely concealed within the scooter's body. The brake structure is more compact, making it suitable for installation within the scooter's body without affecting its external appearance. Therefore, "Embedded Installation" is more suitable for customizing specific scooter models.

Additionally, the braking system allows manual control for gentle braking and includes the traditional method of braking using the rear foot pedal. The entire brake system is cleverly designed and fully functional, providing robust safety assurance for children riding scooters.

[Website](#)

/

[Contact](#)

WeChat: Bay-Dynamics

[Industry](#)

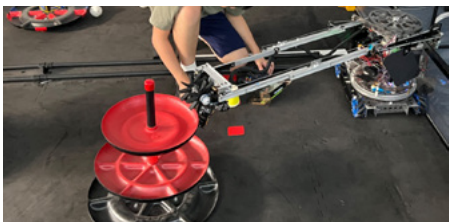
Robotics Competition Training

Introduction

The Shenzhen Bay Area Power Robotics Club is the only robotics club in Guangdong Province that has participated in the American FIRST FTC Youth Technology Challenge for a consecutive 5 years. Since its establishment in Shekou, Nanshan, Shenzhen in 2018, the club has led teams to compete in FTC offline events held in Shenzhen, Guangzhou, Hangzhou, Suzhou, Shanghai, Qingdao, and other cities. Over the past 5 years, we have consistently innovated and made it to the national finals multiple times, earning various awards, including the Inspire Award (the highest honor), Champions Alliance Award, 2nd Place Alliance Award, Think Award, Innovation Award, Design Award, and more. In 2020, we traveled to Russia and secured the 2nd Place Alliance Award.

After many years of development, the club has established a comprehensive and well-structured curriculum system. This curriculum not only ignites the passion for robotics in beginners but also provides a feasible learning path for students who aspire to reach the international top level. Additionally, our team of instructors has extensive practical experience. They play a crucial role not only in guiding students in competitions but also actively participate in the development of challenging engineering projects, broadening students' horizons and nurturing outstanding innovators.

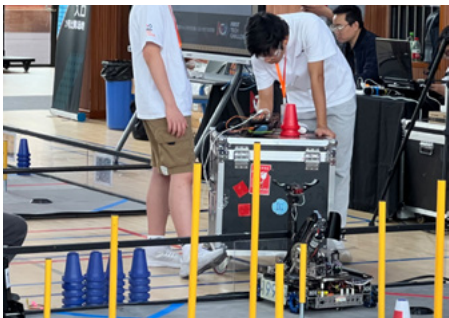
Exhibits



Project 1: FTC-2022 Season Competition Robot

In the FTC-2022 season, our team achieved a national ranking of first place and won the Inspire Award (the highest honor) in all three qualification matches. The primary task of this robot is to collect scoring items on the competition field, which include hollow circular balls and weighted blocks, and then deliver them to a prop rack with three tiers. Additionally, in the last 30 seconds of the match, the robot must complete two additional tasks: transferring rubber ducks from outside the field to inside through a turntable and moving homemade props to the top of the prop rack.

The robot is designed with a modular approach that combines mechanisms for item collection and delivery. It maximizes the use of telescoping slides and a rotating turret, along with an omni-directional wheelbase, resulting in a "crazy" scoring machine.



Project 2: FTC-2023 Season Competition Robot

This robot demonstrates outstanding performance, capable of completing the automatic high-pole deployment task of 6 cones in the 30-second autonomous phase. In the manual phase, it efficiently places cones on vertical poles of different heights. The robot uses a flexible mechanical claw to grip the cones and, through the collaborative efforts of a multi-degree-of-freedom mechanical arm, telescoping slides, and a turret, successfully achieves various scoring functions.



Project 3: Coaxial Omni-Wheel Self-Balancing Car

This project was independently developed by the club's technical team with the aim of providing students with a broader perspective and expanding their skill boundaries. The project uses FTC competition equipment and mounts 4 omni-wheels on the same axis, achieving self-balancing through PID control algorithms. In addition, it boasts impressive features such as lateral movement, rotation, forward and backward motion, and more.

Website /

Contact

WeChat: 13538020618

Industry Sports Industry

Introduction

This is a team dedicated to the development of innovative sports technology products. Currently, the team holds three utility model patents, one design patent, and has applied for ten computer software copyrights. Their products primarily focus on combining various sports disciplines such as Taekwondo, boxing, martial arts, and others to create new and scientifically engaging sports technology equipment, making traditional sports more enjoyable.

The team is primarily composed of enthusiasts of Taekwondo, and they have successfully developed the "TKDING" electronic competitive equipment and electronic protective gear for Taekwondo competitions. Their existing sports technology products can be used for various sports through software developed in-house, featuring multiple game modes.

They adhere to the philosophy of "independent research and development," with a market orientation of "bringing sports into households." Their goal is to create an innovative national brand and inspire more people to love sports.

Exhibits



Provide accurate PSS score values according to Taekwondo competition rules to make the competition more fair. Mobile version of the electronic protective device to increase the game interactive function.

Website

/

Contact

WeChat: a13151923001

Industry

Laser, Radar, Solar

Introduction

Tang Xiaoli, with years of experience in design and as the head of a CAD/FEA/CFD team, possesses expertise in mechanical, electronic, software, and control systems. Currently, he is an independent entrepreneur who has ventured into the development and production of high-precision desktop-level digital gimbals. Tang Xiaoli has achieved multiple independent intellectual property rights and has provided services to numerous research institutions and high-tech enterprises in the academic sector.

Exhibits



The design and development of high precision digital yuntai and applications

The team has developed a high-precision digital gimbal with two degrees of freedom for pitch and azimuth rotation. It integrates the entire system, including the motor, gearbox, driver, control card, and control interface, making it plug-and-play for rapid deployment. This gimbal offers high precision (positioning accuracy less than 0.0075 degrees), high torque (greater than 30 Newton-meters), compact size (dimensions smaller than half an A4 paper, and weighing less than 2 kilograms), and ease of use (plug-and-play). Users do not need to worry about complex component selection and tedious wiring, reducing their learning and operating costs. This allows users to focus more on their core applications, accelerating project implementation.

The source code and interfaces of the underlying control software are open, and the control methods are simple and user-friendly. It is fully compatible with the Raspberry Pi and Arduino open-source ecosystems, making it suitable for engineers and enthusiasts to unleash their creativity. It finds applications in various fields, including IMU inertial navigation calibration, machine vision tracking, laser scanning, laser obstacle clearance, robotic arms, radiation detectors, astronomical and meteorological observations, solar power heliostats, and astrophotography.

The system has served numerous research institutions and high-tech enterprises, with practical applications including:

IMU Calibration: Suitable for IMU calibration on PCBs due to its high precision and compact size. It allows precise measurement of pitch and azimuth angles without tangling wires.

Laser Obstacle Clearance: Equipped with a fiber or CO2 laser, it is used for clearing kites from high-voltage wires or towers and cutting hanging objects like tree branches.

Laser Scanning: Mounted with a laser radar for scanning and imaging, it's used in deformation monitoring of construction tunnels, foundation settlement monitoring, and automatic measurement in mining ore yards.



Solar Energy: Equipped with glass mirrors, the control program automatically calculates the real-time position of the sun in the sky based on GPS or BeiDou coordinates and Greenwich Mean Time. It continuously adjusts the orientation of the mirrors to reflect sunlight to a specified target area, ensuring all-day illumination. It can redirect sunlight to locations such as dark rooms, solar water heaters, and crops. Multiple such heliostats aligned to the same target area can concentrate sunlight, offering a green, pollution-free, zero-emission energy source. These heliostats are commonly used in tower-type solar thermal power plants, but their complex control, cumbersome installation, high cost, and difficulty in personal use make them unsuitable for home applications. This high-precision wireless digital gimbal-based heliostat is the first designed for personal use by enthusiasts.

Website

/

Contact

WeChat: 13713944373

Industry

Education Training Service

Introduction

The "Champion Club for Playful Education" was established in 2021 and focuses on various educational programs, including after-school classes for primary and secondary school students, robot competitions, grading, and community-based projects. We provide comprehensive robotics and maker education solutions to schools, institutions, and communities in the Shenzhen area. Our services include developing after-school class programs, designing and selling educational robots, planning student maker festivals, guiding and supporting robotics programming competitions, improving the quality of robotics programming courses in institutions, and offering technology innovation experiences for community "micro-projects."

Currently, we have implemented after-school programs in several Shenzhen primary and secondary schools, covering subjects such as 3D printing, woodworking, drones, robots, and graphical programming. We have also partnered with various training institutions to offer robotics competitions, grading exams, and other courses. Our students have participated in numerous domestic and international science and technology competitions, achieving outstanding results. Additionally, we have organized community outreach projects and received unanimous praise from the community and parents.

Exhibits



Project 1: School After-School Clubs

Our primary focus is on serving the after-school programs in primary and secondary schools in Shenzhen. These programs revolve around programming and STEM-related activities, aiming to help students develop computer programming skills, spark their interest in technology, foster problem-solving abilities, creativity, and promote teamwork and communication skills. These skills and capabilities are of significant importance for students' career development and personal growth.

Project 2: Community STEM Outreach Activities

Community-based STEM outreach activities for children are designed to ignite their interest and curiosity, nurture scientific thinking and exploration skills, foster creativity and innovative thinking, and promote balanced development in science education. These activities also help develop teamwork and communication skills. Such initiatives have a positive impact on children's growth and development, helping them build an interest in science, understand its importance, and lay the foundation for their future learning and career development.

Project 3: Robot Programming Competitions and Level Assessments

Robot programming competitions and level assessments play a significant role for students by measuring their learning progress and abilities. These events provide rewards and encouragement, offer platforms for participation and showcasing, cultivate a competitive spirit, and promote teamwork. They drive the development of the subject and innovative applications. These activities have a positive impact on both students' personal development and the advancement of the subject matter.



Website

/

Contact

WeChat: SZLIUKANGHUA

Industry

Furniture Industry

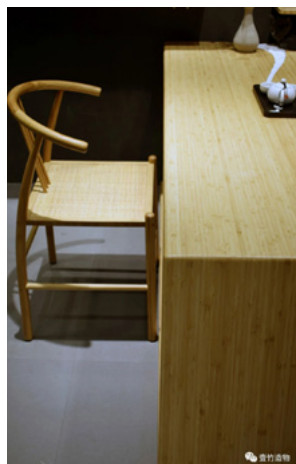
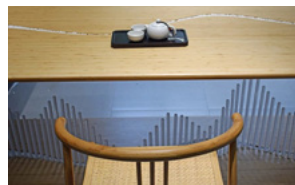
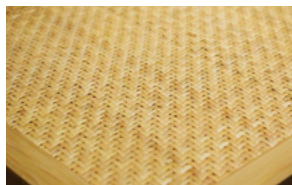
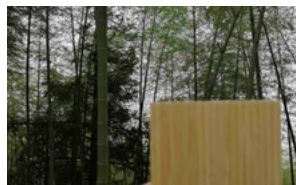
Introduction

Yi Zhu was founded in 2021 by a team primarily composed of students majoring in furniture design from the Art and Design College of Shenzhen Polytechnic. The company is dedicated to contemporary Oriental aesthetic home design and development.

With a focus on the present, Yi Zhu goes beyond traditional home product forms and innovations. The company integrates Eastern and Western design philosophies while also understanding the emotions of daily life. Yi Zhu creates products that embody both form and spirit, quality and warmth, providing a comfortable user experience. In this way, Yi Zhu is shaping the landscape and spiritual home of contemporary Oriental aesthetic living.

Yi Zhu's current product line primarily consists of bamboo and wood products, spanning various categories including cultural and creative items, furniture, and spatial solutions.

Exhibits



The "Bamboo and Misty Mountains" bamboo tea furniture set incorporates various elements, including ribbons, rivers, mountains, clouds, waterfalls, bamboo groves, and more. By utilizing these elements, it creates variations in the landscape, depicting continuous mountain ranges, misty mountain slopes, bamboo groves, and bamboo seas. The design aims to evoke the artistic conception of traditional Chinese landscape painting with its exquisite beauty and poetic charm.

Regarding materials, bamboo is chosen as the primary material due to its characteristics of being warm and graceful. Additionally, supplementary materials such as organic glass and rattan weaving are used. For the organic glass, a frosted finish is applied during surface treatment, enhancing its texture. Rattan weaving is executed using a 45-degree crossweave technique to create a hazy effect and add richness to the overall layers.

The river and waterfall components provide flexibility in the choice of materials, including laying pebbles, casting resin, or using other materials. These elements can be utilized for raising fish or cultivating plants, allowing for personal customization based on individual aesthetic preferences and mood at the time. The design is intended to create an interactive experience between the product and the user during its use.

Maker: Li Yang

No. G25

Website <https://space.bilibili.com/62079062>

Contact 00015522571625 WeChat: liyang53719

Industry Robotics

Introduction

A low-cost quadruped robot composed of 3D printed structural components and servo motors.

Exhibits



This low-cost quadruped robot is constructed using 3D printed structural components and servo motors. It can walk on flat surfaces, providing stability and flexibility. The robot's body is made up of multiple 3D printed structural components, allowing for quick assembly and replacement. Each of the four legs is equipped with three servo motors, which control the robot's gait and posture, enabling it to adapt to different terrains and motion requirements. The robot's control system employs simple control algorithms and sensor technology to achieve basic motion control and environmental awareness. This low-cost quadruped robot has a wide range of applications in education, entertainment, and more. Due to the use of 3D printing and affordable servo motors, it has a relatively low manufacturing cost, making it an excellent choice for beginners interested in learning about robot construction.

Pet Language Design

No. G26

Website <http://www.petcode.cn>

Contact WeChat: Server_error--520

Industry Pet Industry

Introduction

Professional and Technical Services

Exhibits



PAWCODE

The PAWCODE Wilderness Harness is an intelligent pet harness that offers a more scientifically friendly approach to pet behavior management. It aims to provide pet owners with a safe and convenient dog-walking experience. Through precise positioning and smart control, it ensures the safety of pets while making them feel free and comfortable. It is not just a dog-walking tool but also a bridge that promotes deep communication between humans and pets.

Xing Xiadao Team

No. G27

Website

/

Contact

WeChat: qsx18813643800

Industry

Lamps and Lanterns

Introduction

The seasoned innovator in the maker community thrives on innovation, finding joy in creating because of their love for it.

Exhibits



Thousand changes,
DIY desk lamp

Electric Drum Team

No. G28

Website

/

Contact

WeChat: 18218477774

Industry

Automation Equipment

Exhibits



Electric Drum

An electric drum is a new type of drive device that places the motor and reducer inside the drum. It is mainly used in fixed and mobile belt conveyors, replacing the traditional motor and reducer as a separate drive device outside of the drum. Electric drums offer many advantages, including a compact structure, high transmission efficiency, low noise, long service life, stable operation, reliability, good sealing, small space requirement, easy installation, and reduced energy consumption. They are suitable for operation in various harsh environmental conditions and can be used in various automated industrial equipment and assembly line systems.

Website www.igtSTEAM.com

Contact WeChat: izqbux2020

Industry Science and Technology Curriculum Teaching AIDS, Educational Inspiration Toys

Introduction

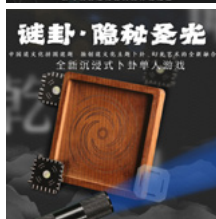
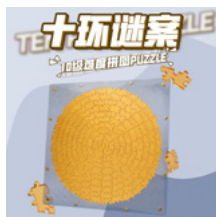
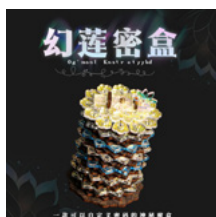
Founded in 2020, it is dedicated to the children's education market. Has two brands, respectively, the ingenuity of the art Lu Xiaomo and Ge Wu Jia. The craftsmanship Lu Xiaomo brand launched STEAM science and technology courses for children and children, providing a rich system of comprehensive courses and corresponding educational tools. These courses are designed to stimulate innovative and creative thinking in children, so that they can solve problems as systematically as scientists and engineers. The Gewu family brand has launched educational toys that guide and encourage children to think positively by solving puzzles. These toys provide an immersive entertainment experience that helps enhance a child's thinking skills.

Exhibits



Project 1: STEAM Science and Technology Courses and supporting Teaching AIDS

Gewu's STEAM Science and technology courses focus on inspiring the interests and thinking skills of children aged 3-6. We guide children's thinking by facing real-world problems, combined with interdisciplinary STEAM engineering thinking, encouraging them to come up with their own solutions and verify them themselves. This process stimulates their curiosity and cultivates practical skills, while encouraging them to actively share and create.



Project 2: Puzzle-solving toys for the mind

Gewujia's puzzle-solving toys are divided into two series, namely BlockFun flat series and BoxFun Space series. BlockFun Graphic series uses math, graphic design and practice to guide children to think positively and solve puzzles. The BoxFun Space series uses mathematical, mechanical, electronic and spatial structure elements to provide children with an immersive play experience, prompting them to explore different ways to solve puzzles, thereby improving their thinking skills. Both sets of toys are designed to exercise children's creativity and logical thinking, allowing them to grow through play.

Website Wechat Official Account: Radio Magazine

Contact WeChat: 13031180599

Industry Media, Publishing

Introduction

"Radio" magazine is the earliest established and most widely circulated renowned magazine in the field of electronics in China (with a cumulative circulation of over 300 million copies). Since its first issue in January 1955, "Radio" magazine has adhered to the mission of "popularization, innovation, practicality, and sharing" to contribute to the popularization and application of electronic technology. Over the years, "Radio" magazine has received numerous honors, including three consecutive "National Journal Awards" and "National Journal Award Nominations." In 2019, it was selected for the "China Science and Technology Journal Excellence Action Plan" jointly implemented by the China Association for Science and Technology, the Ministry of Finance, the Ministry of Education, the Ministry of Science and Technology, the State Administration of Press, Publication, Radio, Film, and Television, the Chinese Academy of Sciences, and the Chinese Academy of Engineering. In 2020, "Radio" magazine, along with "In Love with Robots" magazine (the youth version of "Radio" magazine), was selected for the "China Excellent Popular Science Journal Catalog" organized by the China Science Writers Association. In 2021, it was nominated for the "Fifth China Publishing Government Award Journal Award." In 2023, it was included in the list of "Outstanding Popular Science Journals" organized by the State Administration of Press, Publication, Radio, Film, and Television.

Exhibits



"Radio" magazine is the earliest established and most widely circulated renowned magazine in the field of electronics in China (with a cumulative circulation of over 300 million copies). Since its first issue in January 1955, "Radio" magazine has adhered to the mission of "popularization, innovation, practicality, and sharing" to contribute to the popularization and application of electronic technology. Over the years, "Radio" magazine has received numerous honors, including three consecutive "National Journal Awards" and "National Journal Award Nominations." In 2019, it was selected for the "China Science and Technology Journal Excellence Action Plan" jointly implemented by the China Association for Science and Technology, the Ministry of Finance, the Ministry of Education, the Ministry of Science and Technology, the State Administration of Press, Publication, Radio, Film, and Television, the Chinese Academy of Sciences, and the Chinese Academy of Engineering. In 2020, "Radio" magazine, along with "In Love with Robots" magazine (the youth version of "Radio" magazine), was selected for the "China Excellent Popular Science Journal Catalog" organized by the China Science Writers Association. In 2021, it was nominated for the "Fifth China Publishing Government Award Journal Award." In 2023, it was included in the list of "Outstanding Popular Science Journals" organized by the State Administration of Press, Publication, Radio, Film, and Television.

Website

/

Contact

WeChat: DDSG26

Industry

Drone Filming, Performance, Education

Introduction

Shenzhen Yixing Aviation Technology, with key members including Dong Ge, Gu Leqi, Peng Yuzhou, and several part-time drone pilots and external part-time teachers. The company's main business projects include 720-degree panoramic aerial photography, drone commercial performances, opening ceremony shows, aerial photography, and special aerial photography. Yixing Aviation is committed to exploring new ways of drone performances, offering customized drone performance services, and currently provides a comprehensive curriculum for drone education.

In the field of drone education, the company has developed a systematic drone teaching program, tailored for three age groups: grades 1-3, grades 4-6, and middle school. They have designed three sets of teaching plans to cater to students of different ages. Yixing Aviation actively collaborates with various primary and secondary schools, participating in science and technology festivals, school sports events, maker festivals with drone performances, drone maker fair events, and leading students to take part in city and district-level drone competition activities.

Exhibits



Drone filming, performance, education

大湾区国际创客峰会

Maker Faire Shenzhen

创客在哪里？

WHERE ARE THE MAKERS ?

Scan for more details



Maker Faire Shenzhen



Chaihuo Maker Space