seeed studio

INDUSTRIAL PRODUCT DATASHEET

AI powered thermal camera for safe camping

AI powered thermal camera for safe camping kit with tinyML detection and AWS IoT alerts.

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Overview



This kit provides the components needed to realize AI powered thermal camera for safe camping using Grove MLX90640 IR thermal camera and Wio Terminal. A tinyML model running on the Wio Terminal predicts if an animal or human is approaching and sends data to an AWS IoT topic for alerting.

Key Features

Description

This kit provides the components needed to realize AI powered thermal camera for safe camping. This project introduces how to create a camper which is equipped with Grove MLX90640 IR thermal camera and Seeed's Wio Terminal.A tinyML model running on Wio terminal predicts if there is any animal or human approaching. If detected, data is sent to AWS IoT topic.

Mithun Das provided us with a tutorial to implement AI powered thermal camera for safe camping system using WioTerminal and Grove-thermal imaging camera. The system uses Wio terminal to connect Grove-Thermal Imaging Camera / IR Array MLX90640 110 degree. The data can be visualized from the display screen of the Wio terminal. If there is any animal or human approaching, a reminder will be generated telling camper to pay attention to the situation.

Before officially starting this project, you should prepare the listed WioTerminal, Grove-Thermal Imaging Camera / IR Array MLX90640 110 degree, Grove cable, etc. After preparing these things, we can start to build our AI powered thermal camera for safe camping system! The main process includes connecting the hardware, adding external libraries to compile the code correctly, and Create EI Project,Data Collection,Data Forward,Setup AWS IoT,configure Android mobile applications, debug and run. For specific operations, please refer to **AI powered thermal camera for safe camping**.

- Monitoring data visualization-WioTerminal real-time display
- IoT-based camping safety solutions

Application

- AI powered thermal camera for safe camping
- AI powered thermal imaging camera for safe buildings & communities

Documentations

- **AI powered thermal camera for safe camping**- Credits to **Mithun Das**

Product Gallery



Applications

- AI powered thermal camera for safe camping
- AI powered thermal imaging camera for safe buildings & communities

Resource Links

- https://www.seeedstudio.com/AI-powered-thermal-camera-for-safe-camping-p-5231.html

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