RAiV

Smart Eyes for Robots & Machines

All-in-One 3D Vision Solution
for Robotics & Automation

RAiV is an excellent vision solution for robotics & automation. Its edge-AI SOC with the cutting-edge 3D vision enables depth sensing, object detection, and spatial mapping. The compact, rugged aluminum design ensures seamless industrial integration.

3D Measurement

Industrial Solution for Tough Problems

Object Detection with 3D Position

Easy Integration Quick Adaption

Open Source Python SDK

No External Hardware

www.ml-vpn.com

ML-VPN
Sınırları Aşın

What is it?

RAiV is a smart stereo camera which combines **3D vision** with powerful onboard processors. It delivers depth sensing, object detection, heading estimation with open source software for robotics & automation applications.

RAiV integrates a pair of high-resolution imaging sensors, 6 DoF IMU, octa-core CPU, and a Google Edge TPU, providing immense processing power for 3D vision projects.

How is it used?

Sample images are captured by using the web interface of the RAiV and downloaded to a PC for AI model training. The AI is trained according to the model specifications. Then, the trained model is then uploaded to RAiV.

The sample images, used in training, should include all possible examples of the classes to be detected. This allows the AI model to evaluate and classify, even if the appearance of the objects changes slightly.

python *code can be used for custom application implementation.*

Technical Info

Synchronized Sensors
- Calibrated Stereo Camera
- 6DoF IMU

Processors
- Octa Core A55
- Coral Edge TPU
- H264 Encoder

Network
- Gigabit Eth.
- Wi-Fi 6
- RS-485
- CanBus

Misc I/O
- GPIO & PWM
- USB Serial

Optical Sensor x2

M8 5-Pin Serial I/O Con.

M8 7-Pin I/O Con.

SMA Female Con.

GX12 2-Pin Power Con.

M4 Mount x2

RJ-45 Ethernet

LEDs & Button

USB Serial