

# WHAT IS EDGE AI controller?

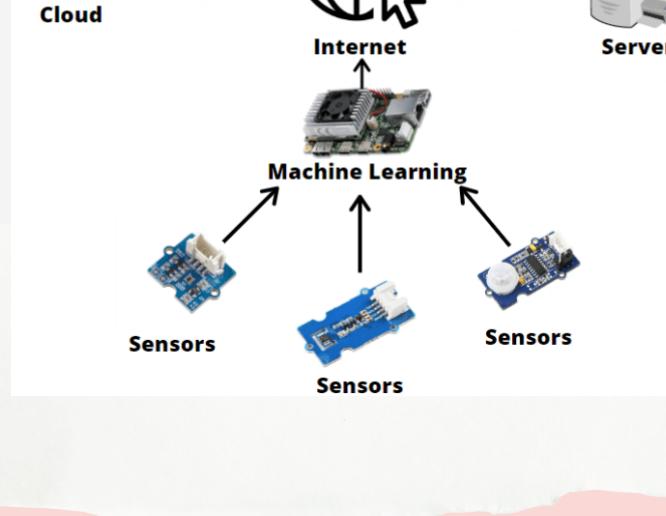
AND WHAT IS IT USED FOR?

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## DEFINITION

**Edge computing** is a distributed computing paradigm that brings computation and data storage closer to the devices where it's being gathered.

**EDGE AI** means running AI algorithms locally on a hardware device using edge computing where the AI algorithms are based on the data that are created on the device without requiring any connection.



**AI processing** is now moving part of the AI workflow to a device and keeping data constrained to a device like this:



**ROCK PI N10**

## ADVANTAGES

- **Reduced Costs**, as fewer data will be transmitted.
- **Security**, data is processed locally to avoid vulnerable from privacy perspective.
- **Highly Responsive**, able to process data really fast compared to centralized IoT models.
- **Easy to Manage**, the devices are self-contained.

## APPLICATION



### AUTONOMOUS VEHICLE

As EDGE AI immediately processes data within the same hardware, they allow for real-time operations like autonomous vehicles possible.

## APPLICATION



### SMART SPEAKERS

Whenever it hears the wake word such as "Alexa", it will start listening to your requests and stream audio data to a remote server where it can process your full request.

### NVIDIA Jetson Nano

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