Sensor Ecosystem for Controlling Agriculture - SECA

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Challenge ID: 16

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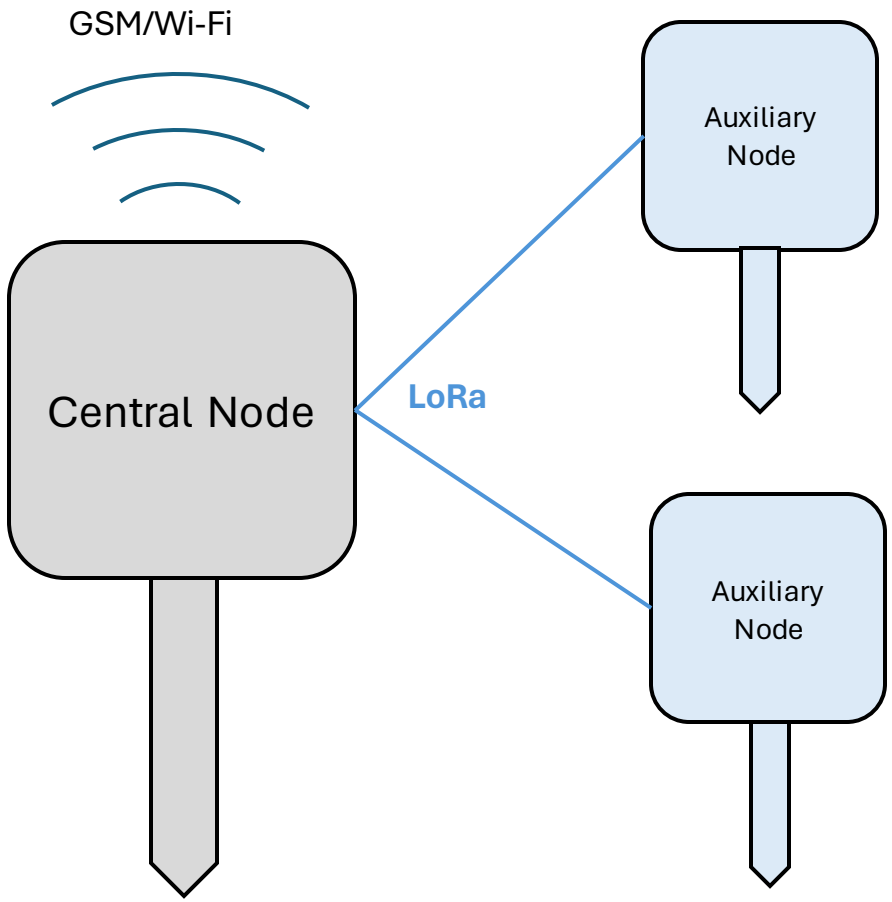
Mildew disease

Alternaria disease

Meetings



Network

BLE	LoRa
< 100 m	> 10 km
No additional hardware	Additional LoRa transceiver

GSM: Dependente do material

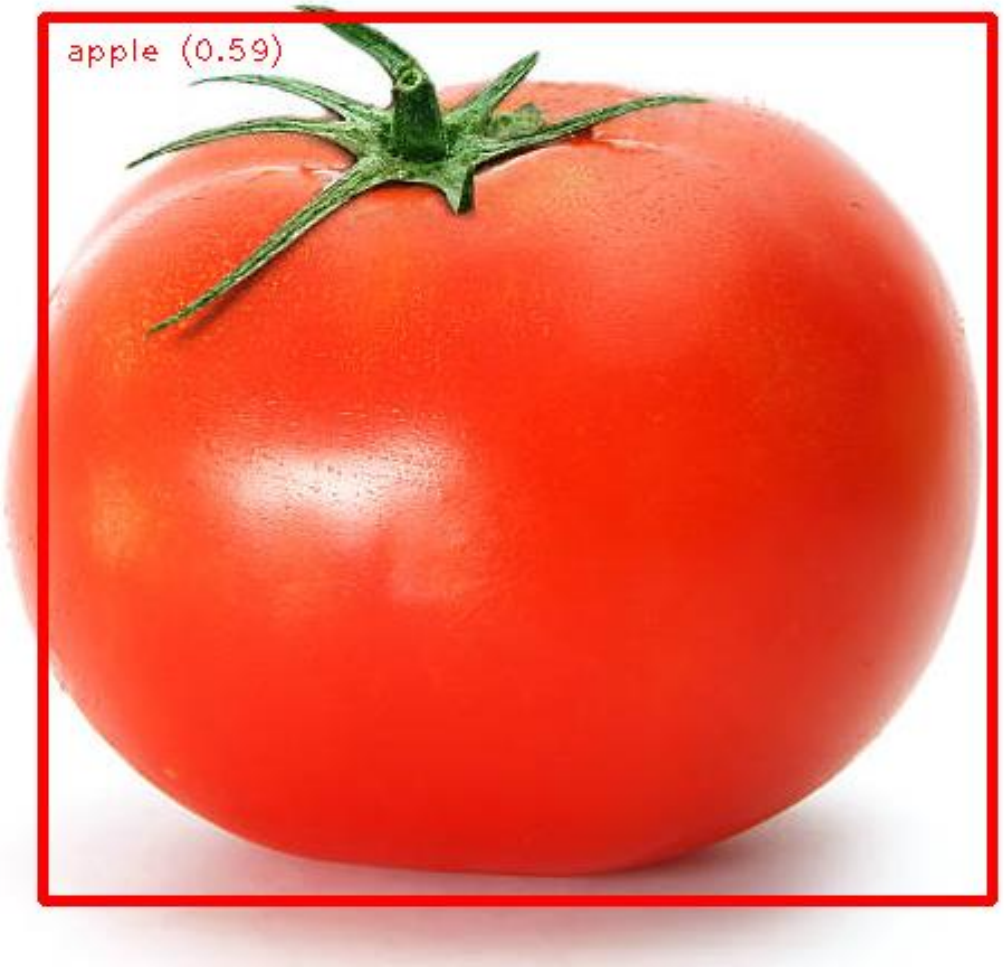
Energy Management

Auxiliary Nodes:

- Initial decision: Solar Panels (dropped)
- Current decision: regular batteries

Central Node:

- Initial decision: Solar Panels
- Current decision: Solar Panels vs. direct connection to the grid



Computer Vision

Two portions:

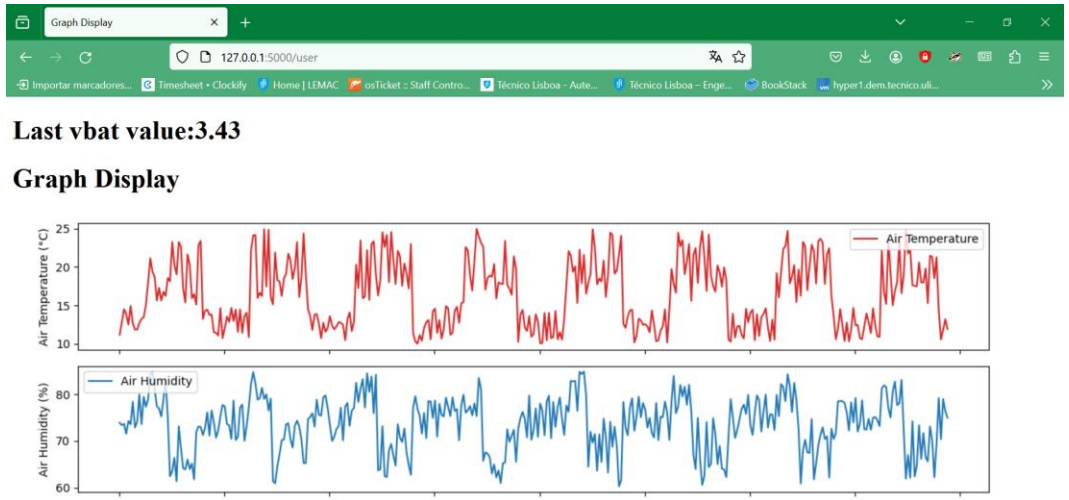
- Finding a framework that does **something**
  - https://github.com/tensorflow/examples
- Change that framework to fit our specifications
  - https://github.com/cpaolini/tomatoleaf

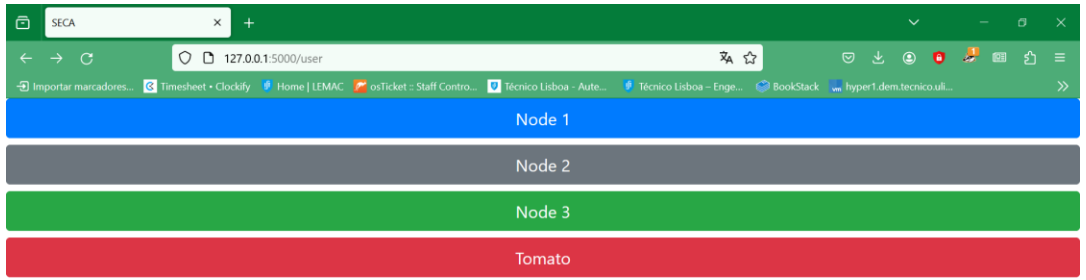
WebApp - Backend

- Full time server to Host Databases and Web Application.
- Created Databases to Allow multiple users with multiple Nodes to have their Data stored.
- Build API to support front-end services.

WebApp – Frontend

- Webapp developed in Flask + Bootstrap
- Login page completed
- Page with node information dispalyed:
  - Battery voltage
  - Luminosity
  - Soil humidity
  - Air humidity
  - Air temperature





Website

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Corrected Schedule