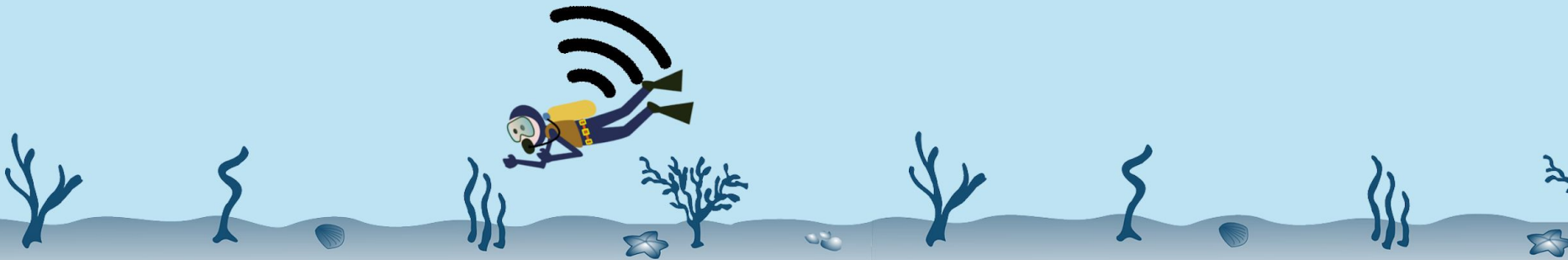# Smart dive

Merckaton 2019 project

CHASSERAT - CHOUVET - LAFFOSSE - NOIZE - RAYNAUD

Presentation of the project

GPS

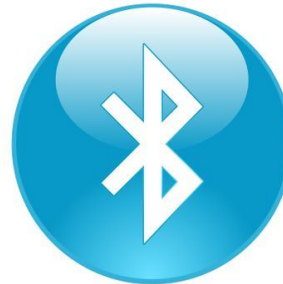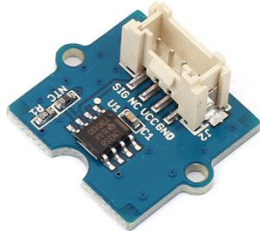Ultrasounds

Hardware
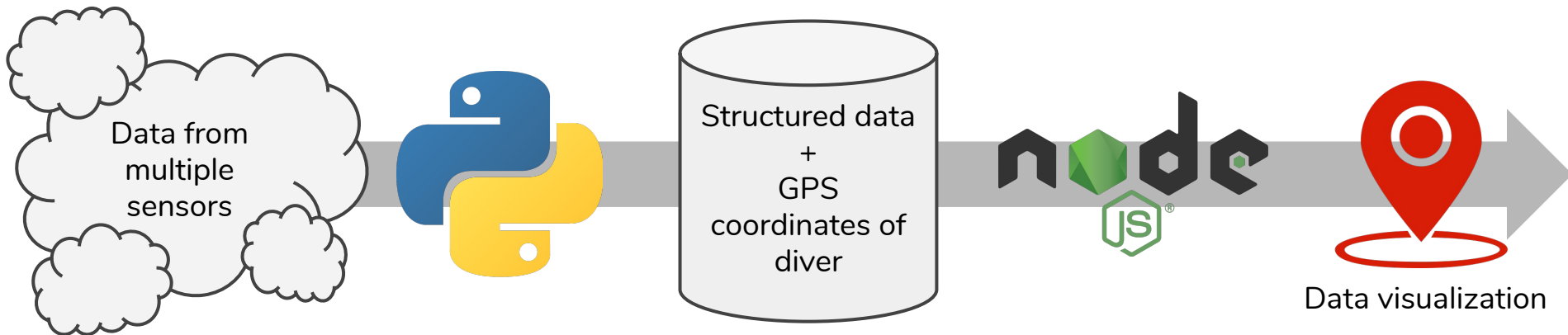What has been done

→ 2 Intel Edison cards

Measurement of Data	Transfer of Data
Temperature sensor, and ultrasonic ranger sensor	Peer-to-peer Bluetooth communication
Add the pressure sensor, and improve the computation of the distance.	Need to send the data to the server.

Software

What has been done

- Micro-services
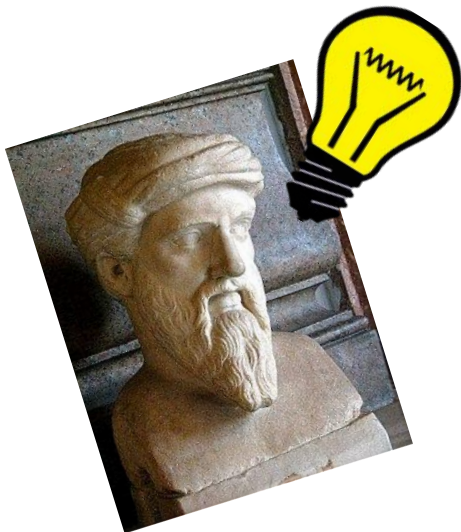 - Data aggregation and refinement
  - Front-end Web interface

Data from multiple sensors

Structured data
+
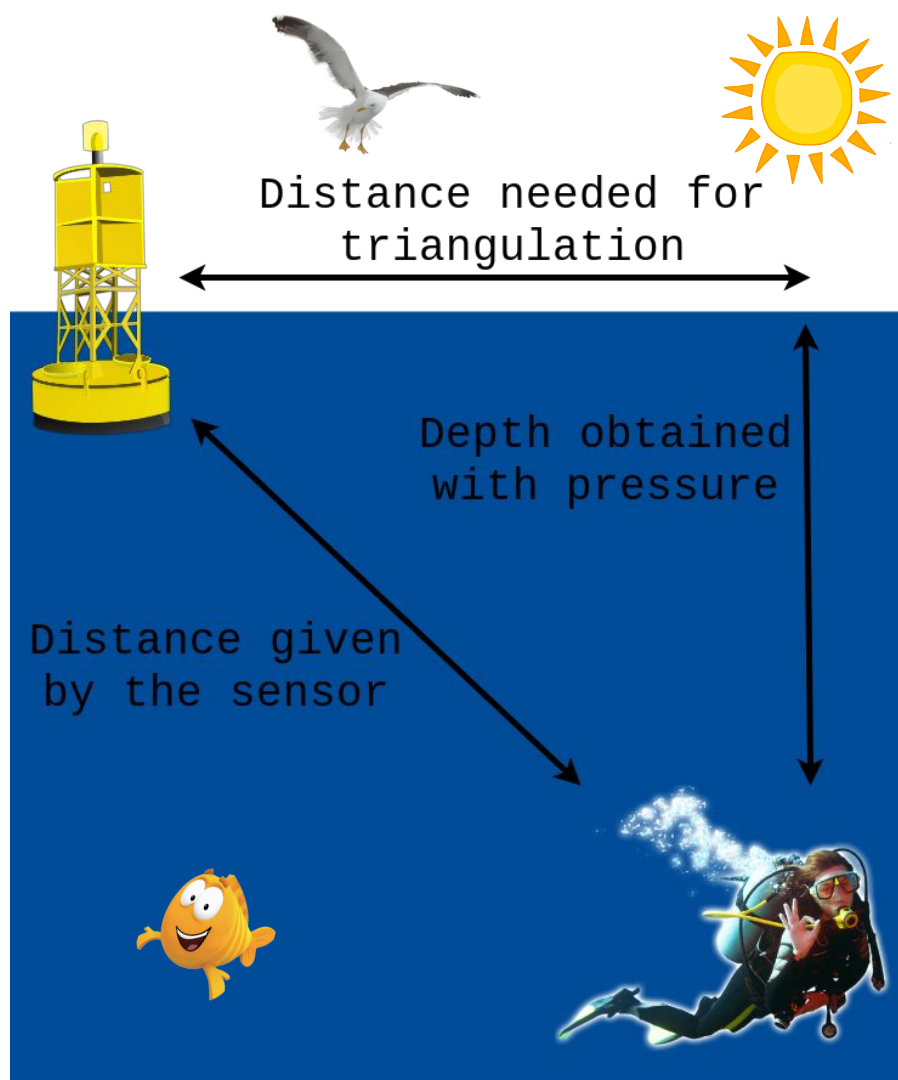GPS coordinates of diver

Data visualization

Demonstration time !

Software

Triangulation to locate the diver

⇒ How to find the surface distance ?

⇒ Demonstration of triangulation !

Distance needed for triangulation

Depth obtained with pressure

Distance given by the sensor

Thank you !