

Welcome

Credits:
Thomas Amberg, FHNW
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Marco Zennaro, PhD
ICTP



Hello

Marco Zennaro, Research Officer, ICTP

Applied Physics → Telecommunications/ICT4D Lab

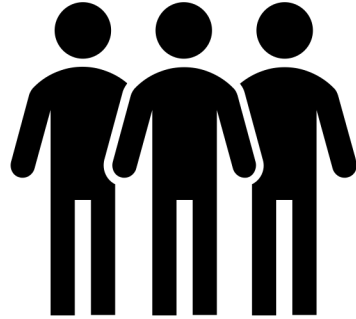
Focal Point of the ITU Centre of Excellence in IoT and Big Data and Statistics

Visiting Professor at Kobe Institute of Computing in Kobe, Japan

Have been working in WSN/IoT for 15 years



You?



Beta alert

This is the first ever *remote* IoT class.

You have different backgrounds.

Content might still be incomplete.

Things will go wrong :-)

Found a bug? Let me know! Feedback is welcome.

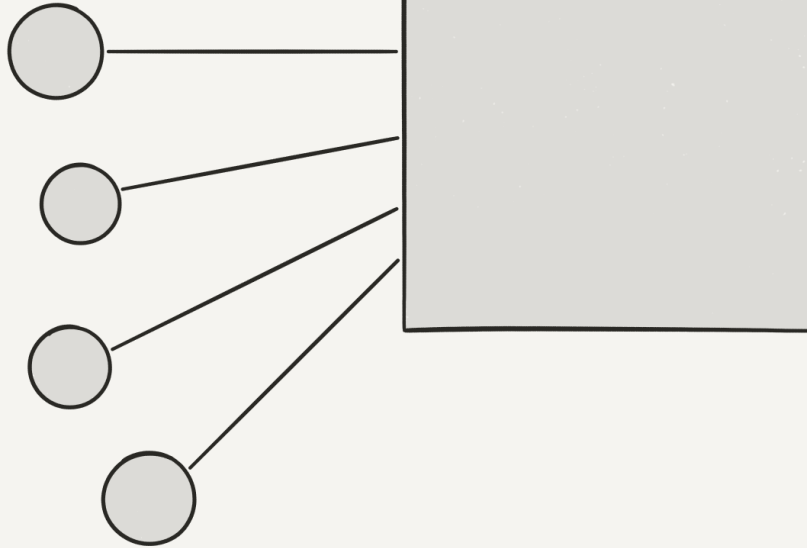
Learning targets

Understanding IoT systems and their fundamental concepts, including the **acquisition**, **transport** and **visualisation** of sensor measurements.

Experimenting with the **software** part, without electronics, of an end-to-end IoT system based on IoT platforms.

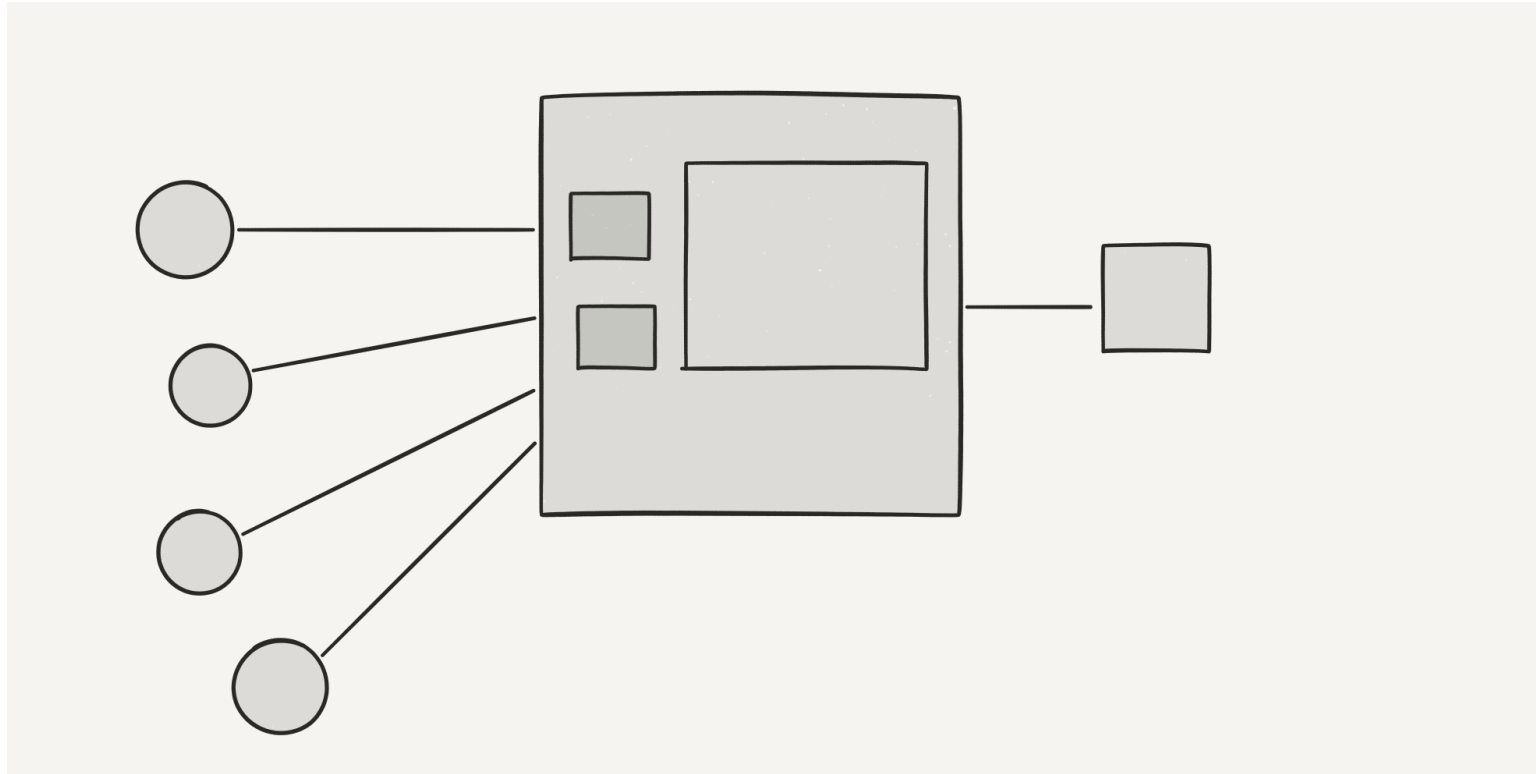
High level view

Sensors

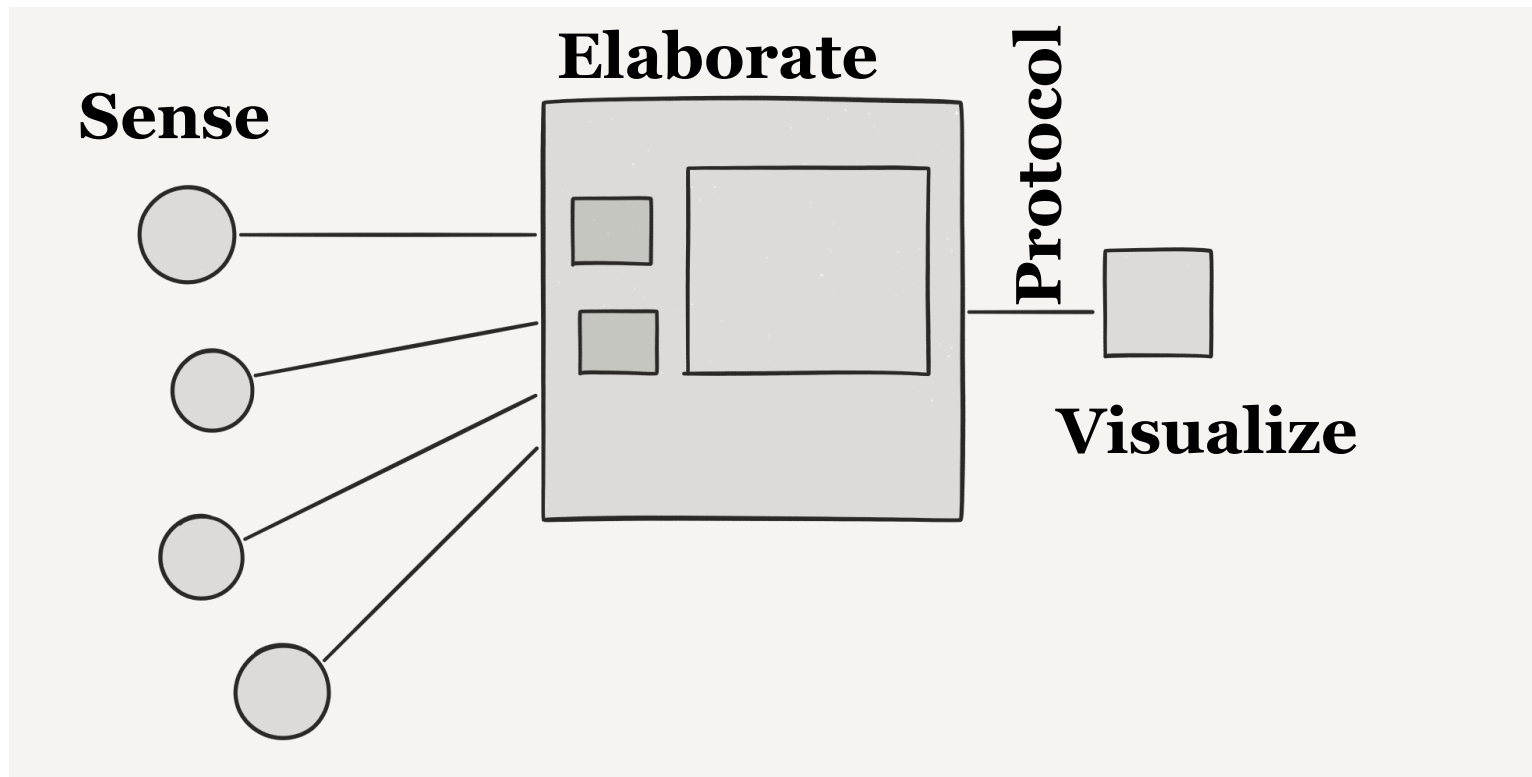


**Information
Data
Knowledge**

CS/EE view



Our course and labs



Today

Introduction to IoT

IoT and SDGs

Getting started with Python (Sidoine Ode)

GitHub

All material (slides, code, examples) will be available on this repository:

<https://github.com/marcozennaro/benin-2020>

Team project

2 person teams, building an IoT system.

10 hours of work per person, 1 prototype.

15' presentation of the project on **October 22** .

Project source code and setup steps on GitHub.

Both team members are able to explain the project.

Hands-on sessions

"Be excellent to each other", asking / helping is OK.

Google error messages to fix issues.

Coping blindly does not lead to new insight.

Reading other people's code helps a lot.

Books on IoT

A book is not required for this workshop.

This [Wiki](#) has [a list of books](#) on a range of topics.



Motivation

I'm highly motivated to provide the best experience.

Hardware takes a lot of trial and error to master.

If something does not work, try again, twice.

It's worth the effort, IoT is here to stay :)

Feedback?

Email me mzennaro@ictp.it