Available Material

AMBIENT INTELLIGENCE

List of the material available at the LADISPE lab

POLITECNICO DI TORINO

e-Lite

On the Development Bench…

- 2 Raspberry Pis
  - Accessible through ssh or HTTP
    - shared components
  - Pi-1 hosts a RazBerry module (for Z-Wave)
  - Pi-2 is customizable on request
- 1 Philips Hue bridge
  - shared component

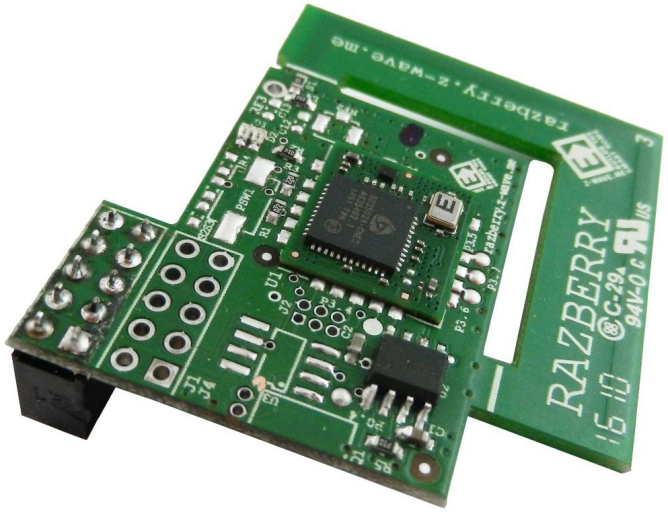
On the Development Bench…

- Raspberry Pi with the Z-Wave controller
  - IP Address: 192.168.0.202
  - web interface: http://192.168.0.202:8083
- Philips Hue bridge
  - IP Address: 192.168.0.201

Philips Hue

- 6+ Hue bulbs
- 1 Friends of Hue LED strip
- Software emulator:
  - https://steveyo.github.io/Hue-Emulator/

Z-Wave Devices



- 3+ RaZberry
  - Z-Wave controller
  - to create and manage a Z-Wave network
  - 1 is on the Development Bench (fixed)
  - for Raspberry Pis
  - https://z-wave.me/products/razberry/

Z-Wave Devices

- Metering Plugs
  - On/Off
  - some of them are "dimmable"
- Multisensors 4-in-1
  1. Light
  2. Humidity
  3. Temperature
  4. Motion

Z-Wave Devices

- 1 Door/Window Sensor

- 2 Multisensors 6-in-1
  1. Light
  2. Humidity
  3. Temperature
  4. Motion
  5. Vibration
  6. UV

MyHome

- Demo wall with various components
  - sponsored by BTicino
  - in the second room of LADISPE
  - fixed

Fitness Trackers

- 1 Jawbone Up3
  - with heart rate measurement
  - https://jawbone.com/fitness-tracker/up3
- 1 Fitbit Flex
  - https://www.fitbit.com/flex
- 2 Fitbit Charge
  - with heart rate measurement
  - https://www.fitbit.com/charge

Raspberry Pi & Co.

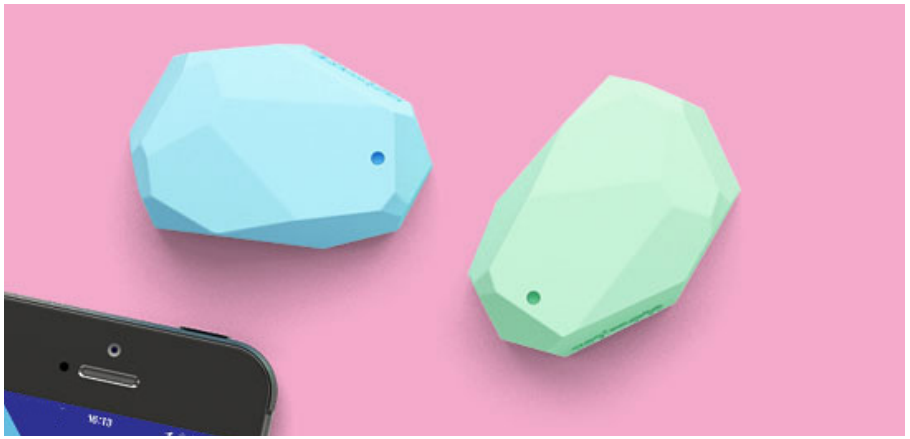
- 10+ Raspberry Pis (with SD cards, cases, …)
- RaZberry modules (Z-Wave controller)
- ZigBee devices (metering plugs, …)
- Arduino boards
  - 10+ Arduino Yun
  - other versions available
- EnOcean devices (temperature sensor, rocker-switch)

Smartwatches

- 2 Huawei Watch 2 Sport
  - with WearOS (by Google)

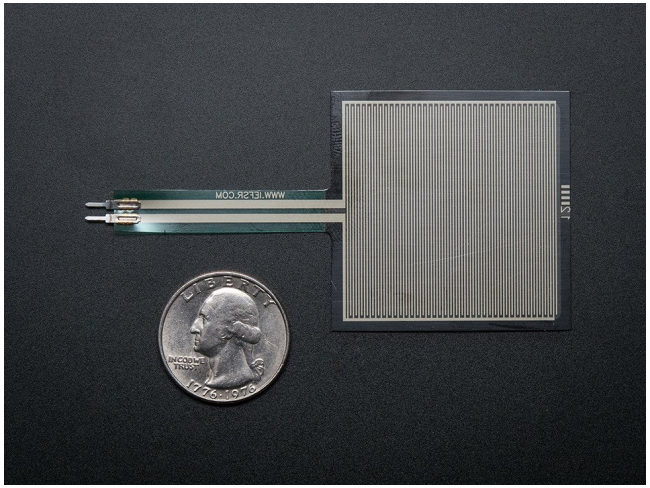
Bluetooth Beacons

- 9 Estimote beacons
- 10 Stiker beacons
- https://estimote.com



Raspberry Pi & Co.

- Proximity sensors (ultrasound) for Raspberry Pi/Arduino
- Force-sensitive Sensor
- Load cells
- Spare hardware
  - Breadboards
  - LEDs
  - Resistors
  - …



USB Devices and Add-ons

- USB-Bluetooth adapters
- USB-WiFi adapters
- LCD Touchscreens 2.8”
- USB Microphones (for Raspberry Pi)
- USB Webcams
- USB Powerbanks
- Active speakers
  - "traditional" (cable)
  - 2 Bluetooth

RFID/NFC Tags

- RFID/NFC Keyfobs
- RFID/NFC Stickers
- RFID/NFC Cards
- RFID/NFC Bracelets

Other Devices

- 1 Mini Thermal printer
- 2 Arduino Braccio

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