Instituto Tecnológico de Chihuahua

Mobile Learning and Smart Embedded Systems Lab.

Building an IoT Smart Sensor Network and Platform for Smart Classrooms

Presented by :

Raúl G. A. Sánchez Ruiz

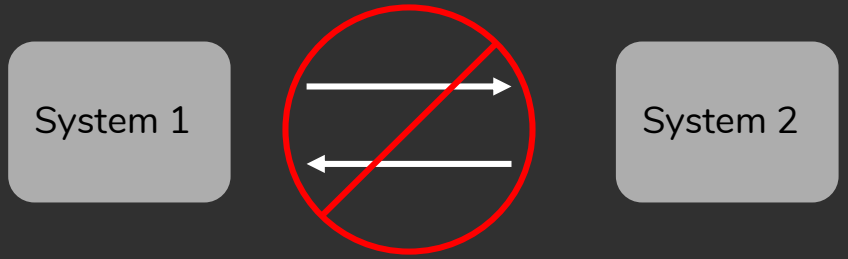
Alberto Pacheco González

23/03/2018

Internet of things + Classroom = Smart Lighting

Interoperability

Ability of systems to work with other systems



-40%

How is interoperability addressed?

Application level:
-Semantic uniformity

Device and link level:
-Gateways

```
ex:Device a ssn:SensingDevice ;
     ex:madeIn dpedia-owl:Taiwan ;
     as:hasAttribute ex:value ;
     as:hasAttribute ex:location .

ex:value as:associatedTo <sib:vtt.fi:10011> .
ex:location as:associatedTo <sib:vtt.fi:10011> .
```

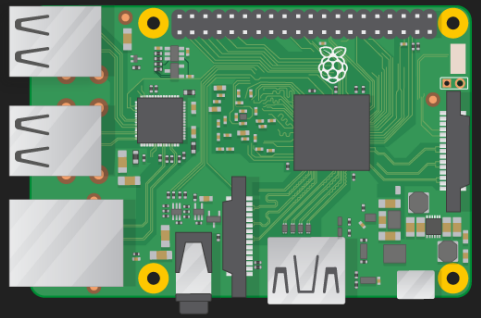
An IoT Wireless Sensor Network in Classroom

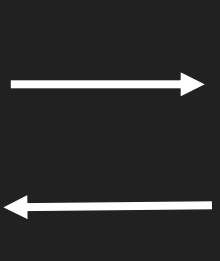
HTTP

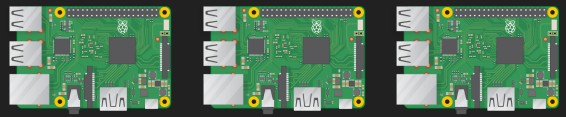
Gateway

802.11n
o
BLE

Conclusions and future work







Complete platform

Raúl Sánchez

Master Degree Student on ITCH

Twitter: @raulbass6

Correo: rgsanchez@ieee.org