@ ellucian.

Dynamic Context Building for ROOF

**AISHWARYA JAKKA** 

Associate Software Developer

Ellucian



## About the Prototype



**IEEE PROJECT** 

1931.1 - Standard for an Architectural Framework for Real-time Onsite Operations Facilitation (ROOF) for the Internet of Things

- Working group chair : Mr. Syam Madanapalli Director(IoT) of NTT Data
- Done as a undergrad project
- Part of the Standard's working group

## Internet of Things

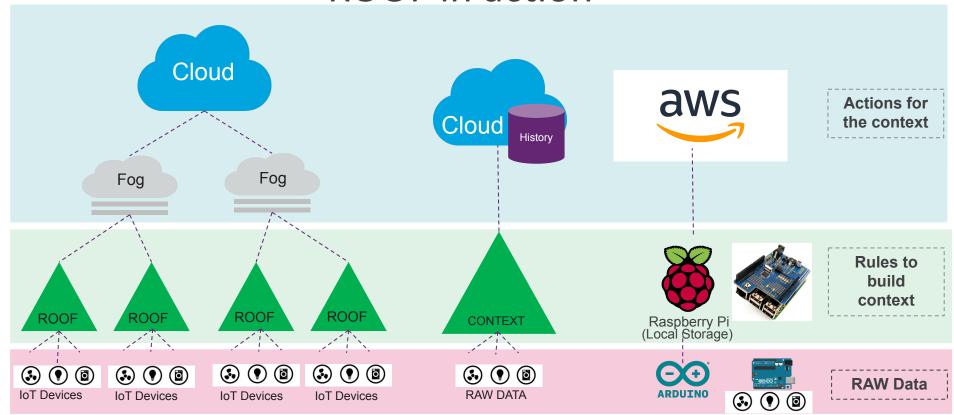


- By 2020,50 Billion IoT devices are estimated to be connected to the cloud
- IoT Devices use the services from the cloud to build contexts based on the need of the users.

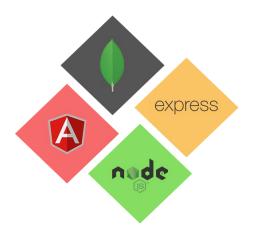
#### The Problem Statement

- For 'n' services, a (2^n)-1 contexts are possible i.e suppose n = 25, then possible contexts are 33,554,431.
- It is difficult to build ,understand or the need of every context while deploying the IOT application
- In this project, a context-building framework is developed and implemented for a basic Smart Home IoT application

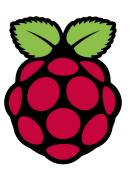
#### **ROOF** in action



### Platform and tools used







# Implementation Setup

