

INTERNET OF THINGS

Companies that use IOT



**General
Electric**



TESLA



SIEMENS



**IOT
Engineer**

**Data
Scientist**

**IOT
Product
Manager**

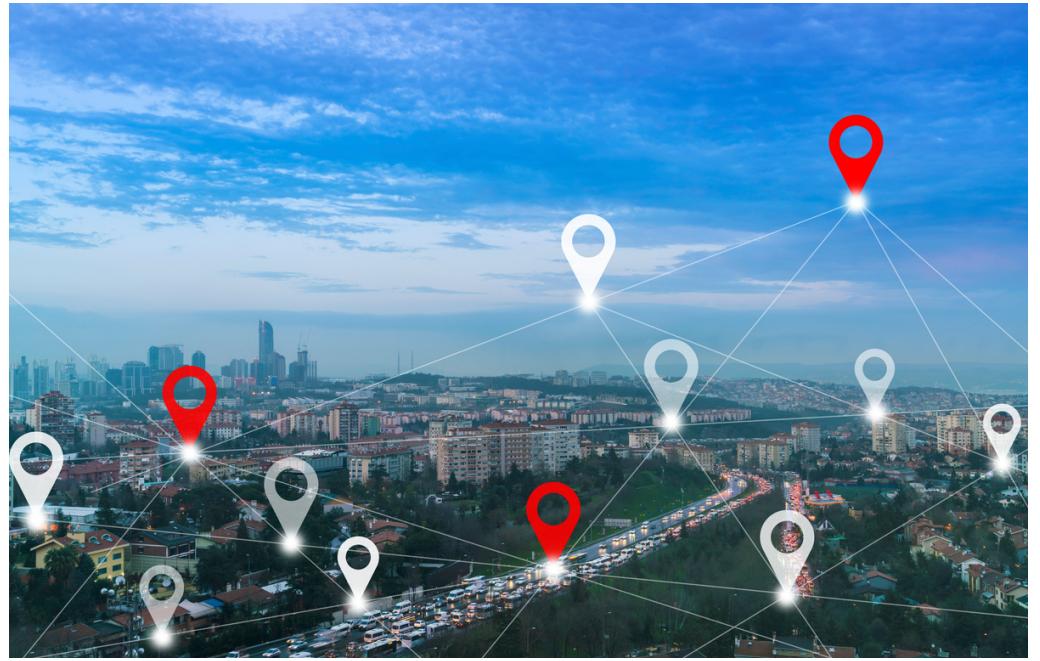
**Cybersecurity
Analyst**

**Industrial
IOT
Specialist**

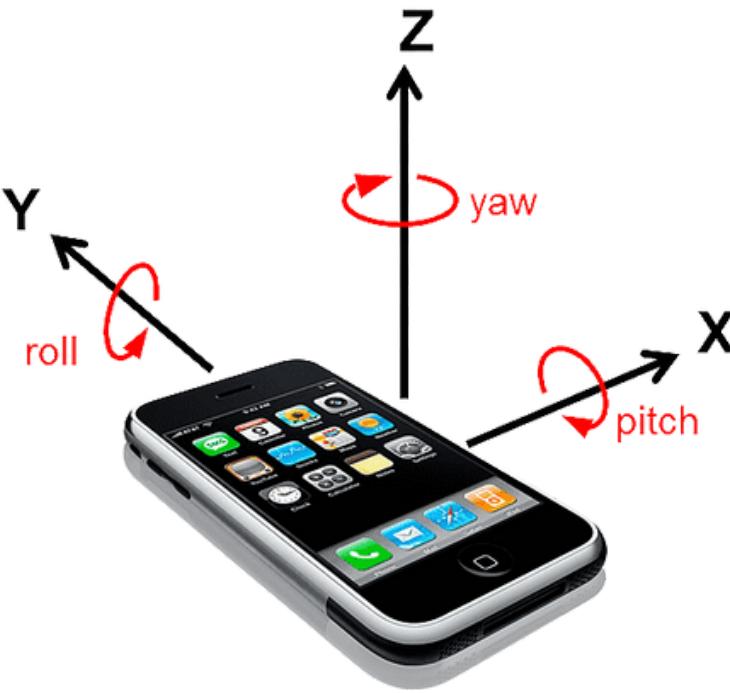
**Smart Home/
Building
Specialist**



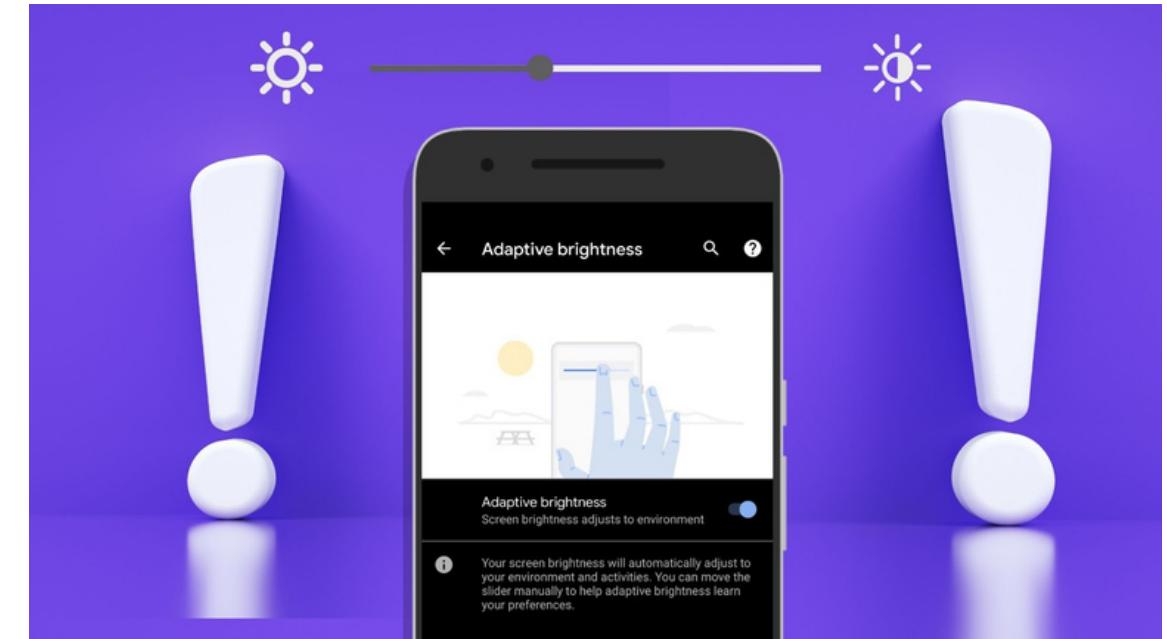
Career Opportunity



GPS Tracking



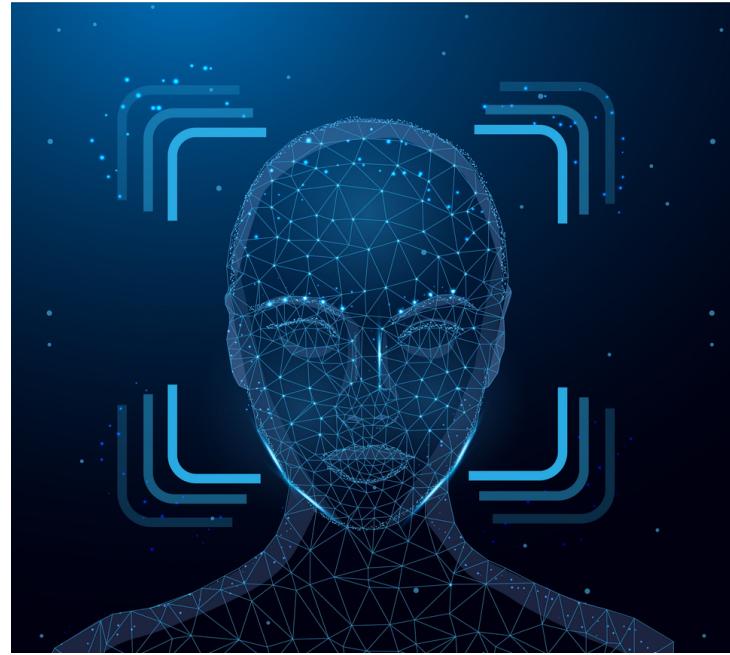
Mobile Gyroscope



Adaptive Brightness



Voice Detection

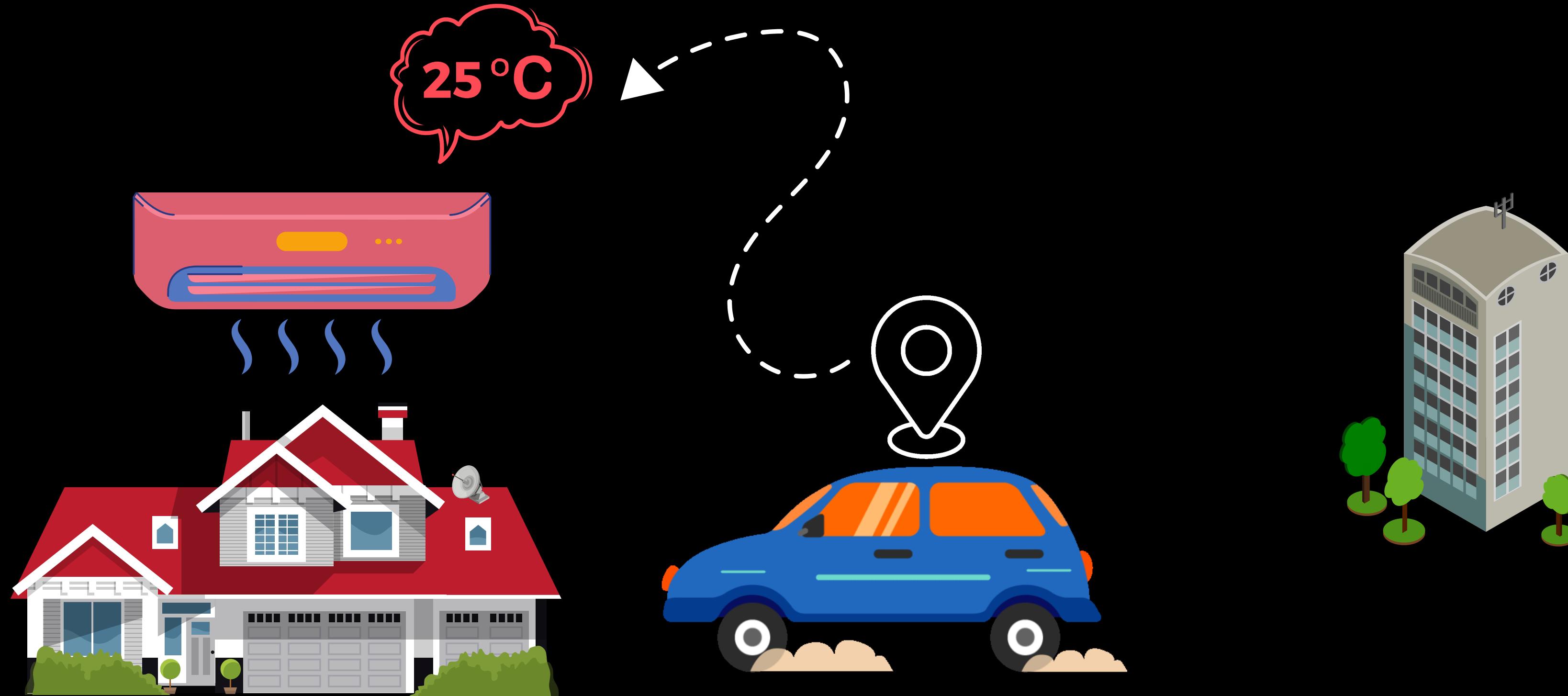


Face Detection

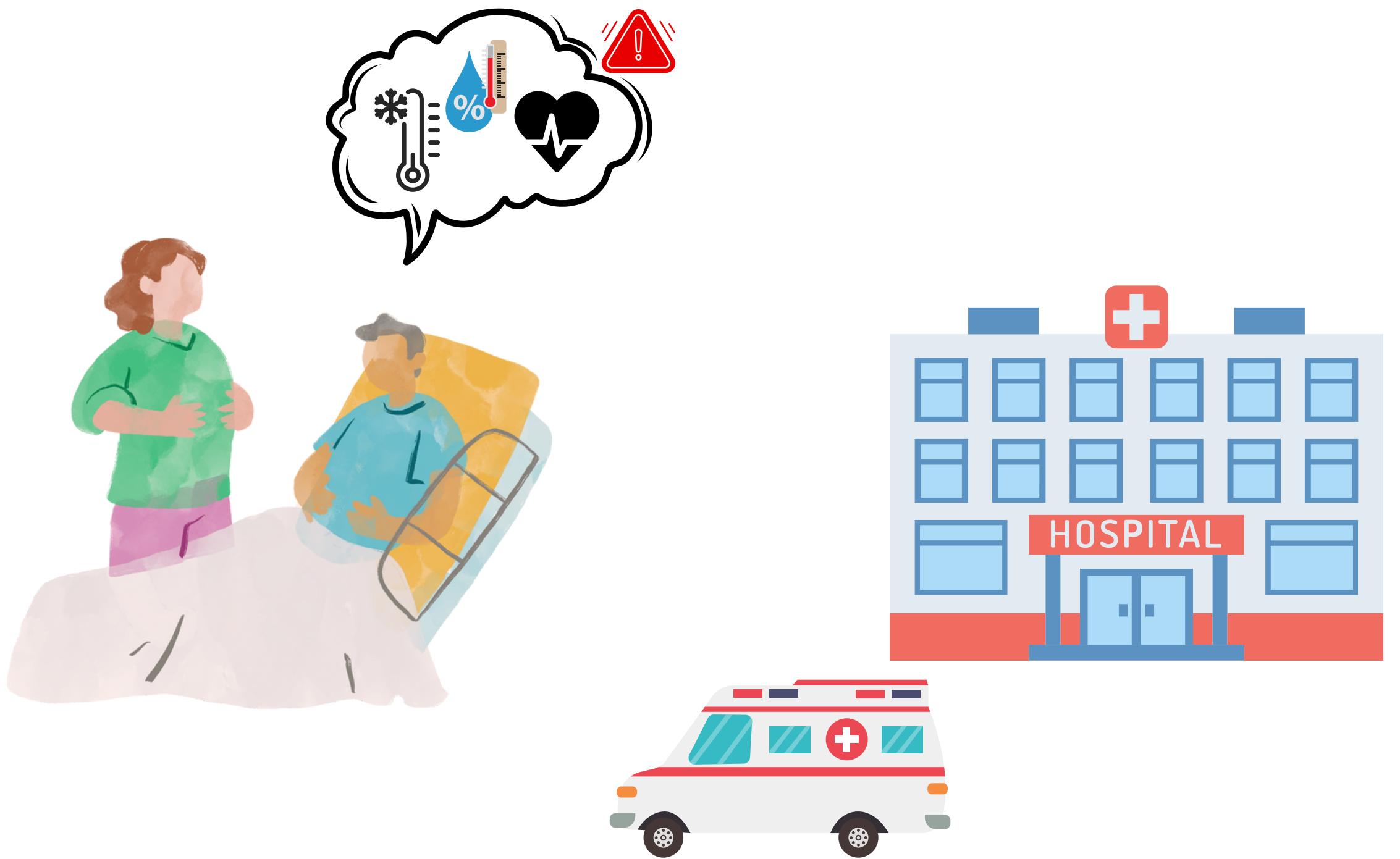
What is Internet of Things?



Connecting everyday things embedded with electronics, software and sensors to the internet enabling them to collect and exchange data



Why do we need IOT?

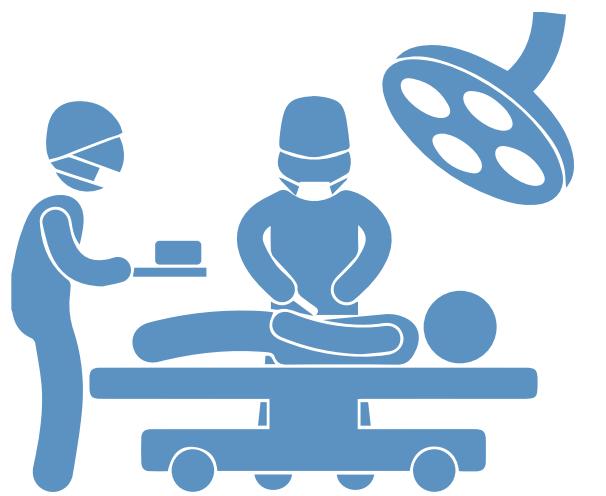
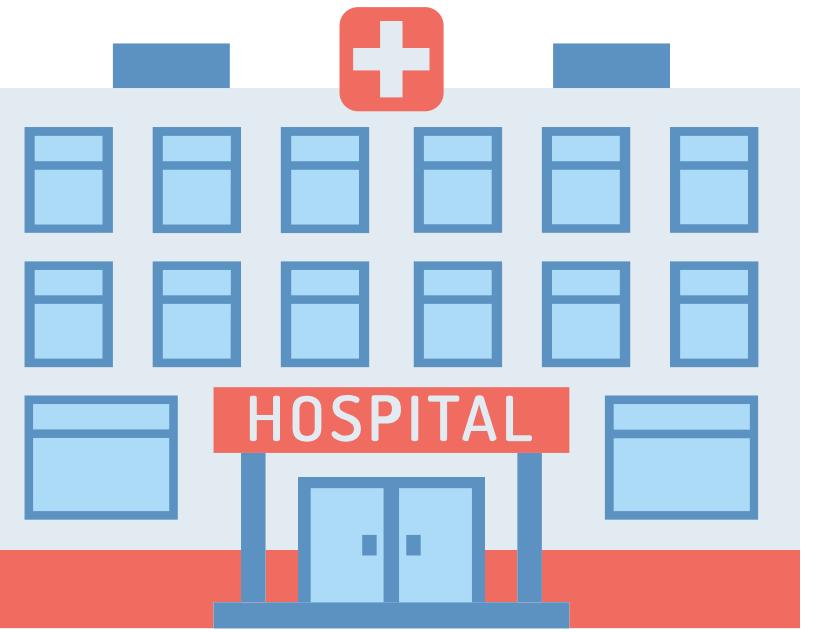




Prescriptions



Medicine



Operation Theater



Why do we need IOT?

EXPAND INTERDEPENDENCE
OF HUMANS

INTERACT

CONTRIBUTE

COLLABORATE

TO THE THINGS

BENEFITS OF IOT

Efficient Resource Utilization

Improved Security

Minimizing Human Effort

Development of AI through IOT

Saves Time

BENEFITS

FEATURES OF IOT

Connect

connect various things to the IOT platform

Analyze

Analyse the data collected and use
it to build business intelligence

Integrate

Integrate various models to improve user experience

FEATURES OF IOT - CONNECT

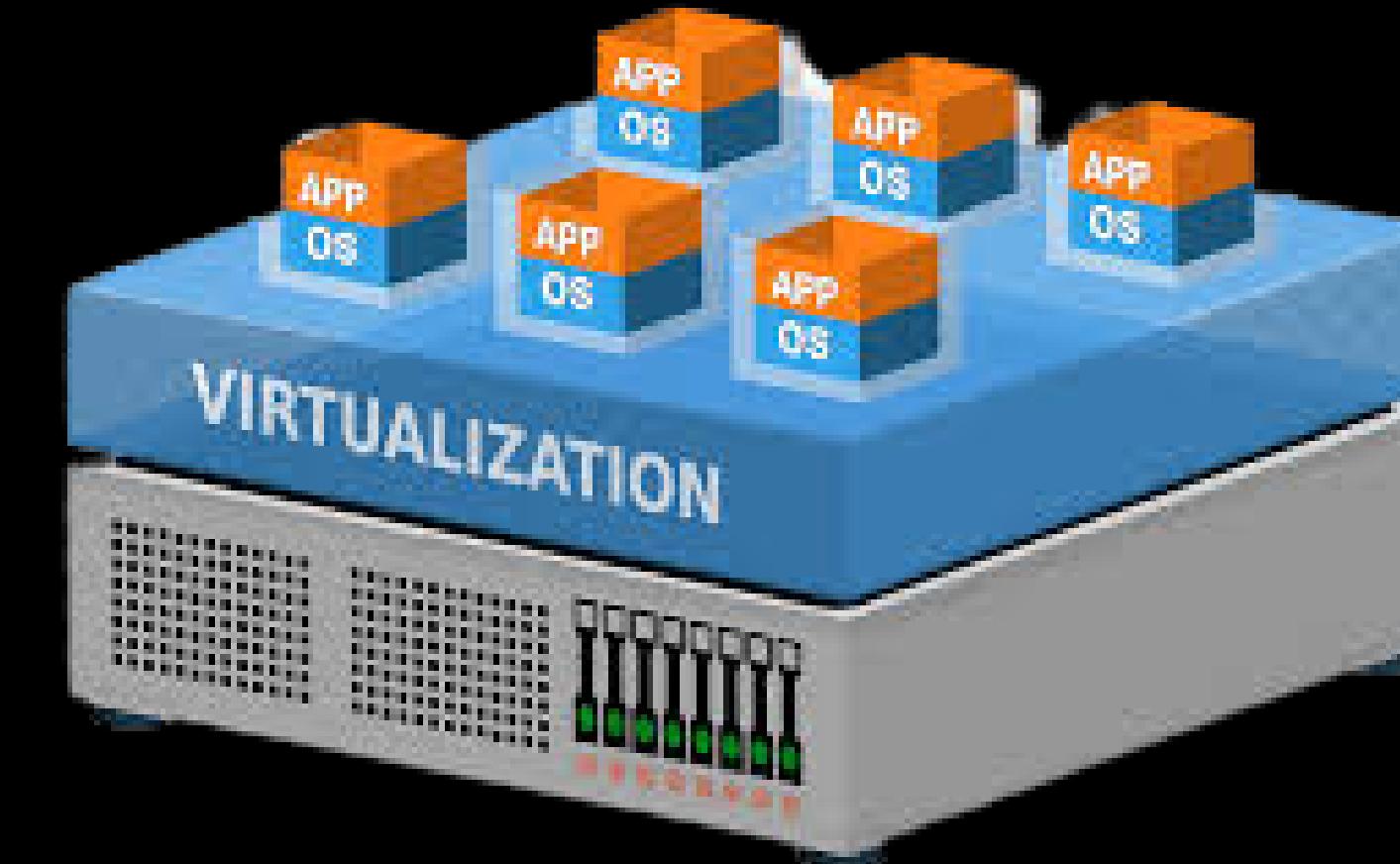
Connect

Analyze

Integrate

Device Virtualization

Standardize integration of devices with the IOT enterprise



FEATURES OF IOT - CONNECT

Connect

Analyze

Integrate

High Speed Messaging

Enable reliable, secure and bi-directional communication between devices and the cloud



FEATURES OF IOT - CONNECT

Connect

Analyze

Integrate

Endpoint Management

Manage device endpoint identity, metadata and lifecycle states for all devices



FEATURES OF IOT - ANALYZE

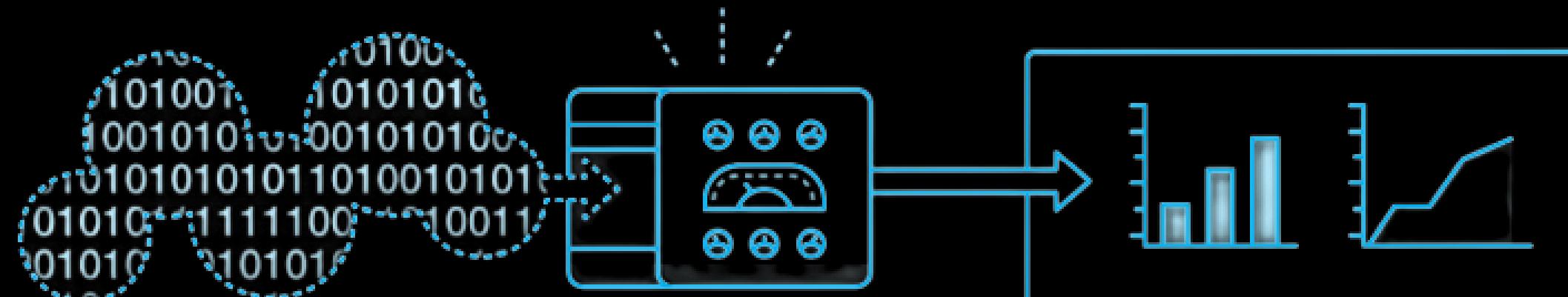
Connect

Analyze

Integrate

Stream Processing

Real-time analysis of incoming data streams with event aggregation, filtering and correlation



FEATURES OF IOT - ANALYZE

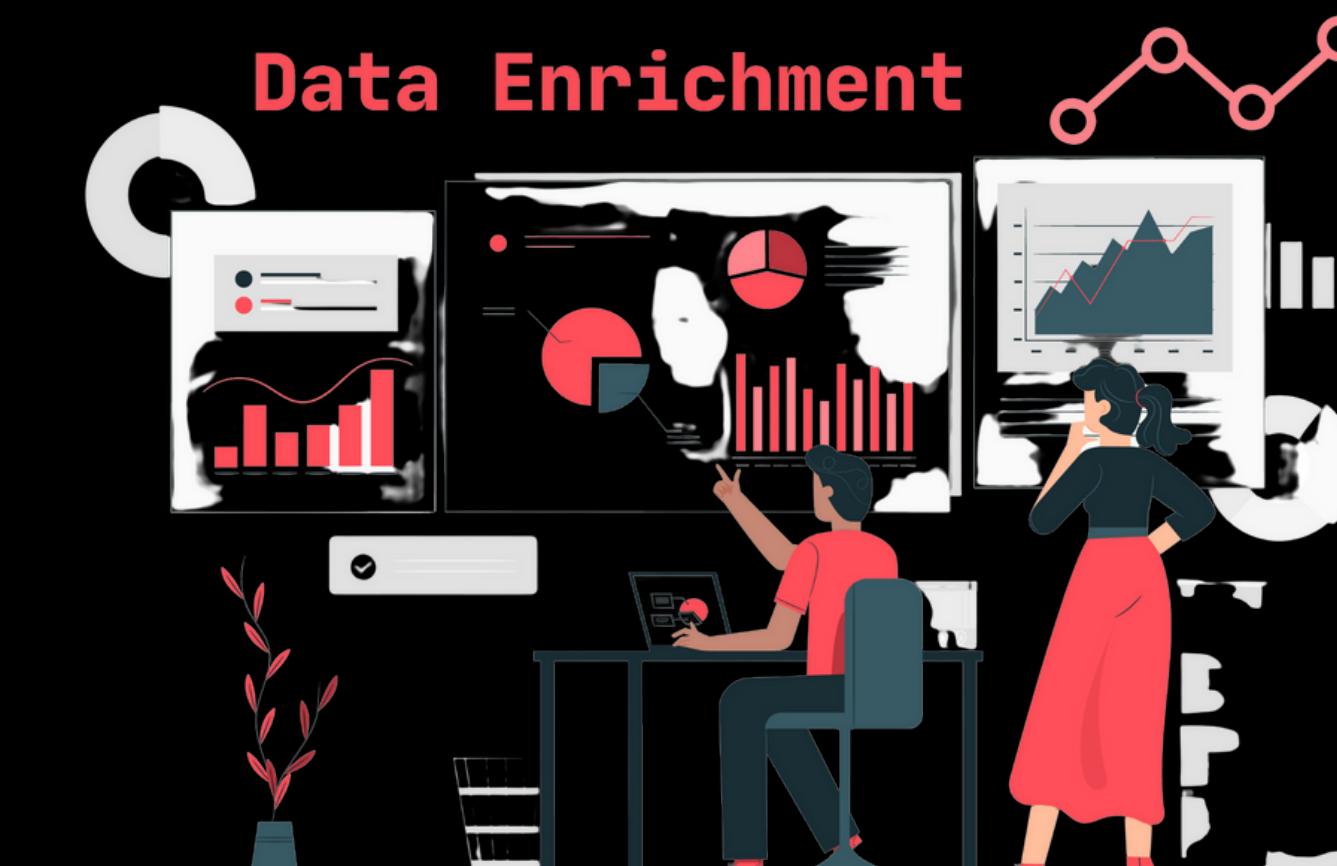
Connect

Analyze

Integrate

Data Enrichment

Enrich raw data streams with contextual information
and generate composite stream



FEATURES OF IOT - ANALYZE

Connect

Analyze

Integrate

Event Store

Query and visualize massive amounts of data with integrated BI cloud service support and enable big data analysis



FEATURES OF IOT - INTEGRATE

Connect

Analyze

Integrate

Enterprise Connectivity

Dynamically dispatch critical IOT data and events to application and process flows



FEATURES OF IOT - INTEGRATE

Connect

Analyze

Integrate

Rest API

API- based integration with cloud apps and IOT devices



FEATURES OF IOT - INTEGRATE

Connect

Analyze

Integrate

Command and Control

Send message to the devices from enterprise and mobile apps, independent of device connectivity



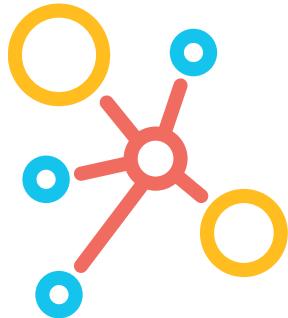
IOT Architecture

Basic Architecture



Application layer

Responsible for delivering application specific service to the user and defines application in which the IOT can be deployed



Network layer

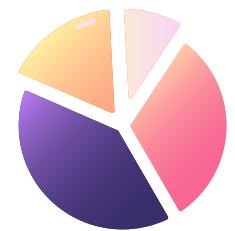
Responsible for connecting smart things, network devices and servers and also used for transmitting and processing sensor data



Perception layer

Sensor sense and gather information about the environment

5-Layer Architecture



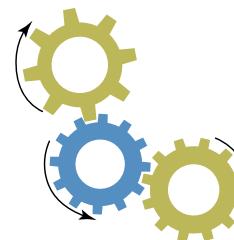
Business Layer

Manage the whole IOT system, including applications, business and profit models and user's privacy



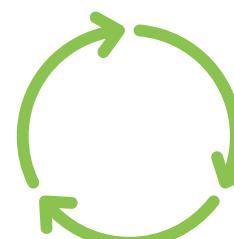
Application Layer

Responsible for delivering application specific services to the user



Processing Layer

Stores, analysis, and processes huge amounts of data, employs databases, cloud computing and big data processing modules



Transport Layer

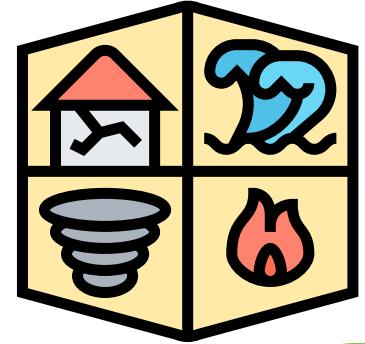
Transfers the sensor data between layers through networks such as wireless, 3G, LAN, Bluetooth, RFID



Perception Layer

Sensors senses and gather information about the environment

Applications of IOT



Disaster Management

Applications

Agriculture



Industrial Automation

Everyday life



Health Care



Smart Cities





Thank You