



SNS COLLEGE OF ENGINEERING

Kurumbapalayam(Po), Coimbatore – 641 107

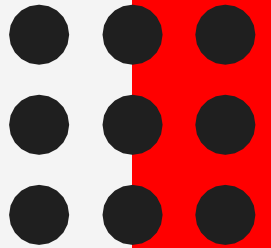
An Autonomous Institution

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UNIT 2

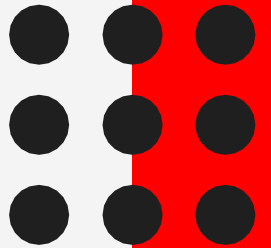
IOT Reference Architecture and Technologies



Control Units

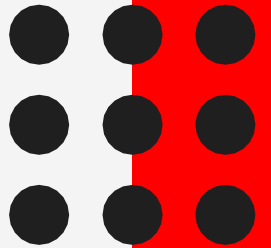
Control units in IoT

- An Electronic Control Unit (ECU) is a device, such as a sensor or an actuator, that is connected to other devices via a CAN Bus.
- The Internet of Things is rarely discussed without the conversation steering to data and the new data economy
- Sensors are the source of IoT data



Communication Modules

- IoT devices are found everywhere and will enable circulatory intelligence in the future. For operational perception, it is important and useful to understand how various IoT devices communicate with each other.
- Communication models used in IoT have great value. The IoT allow people and things to be connected any time, any space, with anything and anyone, using any network and any service.

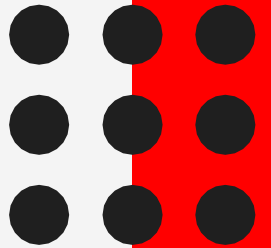


Types of Communication Modules

- Bluetooth
- Zigbee
- Wifi

Bluetooth:

It is a serious technology used for IoT applications. Apart from being the ubiquitous solution for hands-free calling and wireless transmission technology for audio, Bluetooth technology is leading in consumer and business IoT



6LOWPAN

- **6LoWPAN is the name of an Internet Engineering Task Force (IETF) standard that defines an approach for routing Internet Protocol version 6 (IPv6) over low-power wireless networks.**
- 6LoWPAN specification contains packet compression and other optimization mechanisms to enable the efficient transmission of IPv6 packets on a network with limited power resources and reliability, which makes efficient IPv6 communication over low-power wireless networks possible.

