DON BOSCO INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION

IEEE-DBIT MTTS STUDENT BRANCH

Report on "LoRaWAN-Technology, Solutions and Ecosystem"

Topic: LoRaWAN- Technology, Solutions and Ecosystem

Speaker: Mr. Abhay Phansikar (Chairperson - IEEE Bombay Section)

Date & Time: July 30, 2018. 02:15 p.m. – 04:00 p.m.

Venue: Seminar Hall, Fourth Floor, Block -A

Audience: 64 students from TE-EXTC, 10 students from BE-EXTC

Description:

The session began with an introduction given by Mr. Vedant Vyawahare. Mr. Abhay Phansikar then gave us a brief introduction on Internet of Things (IoT) and its applications. IoT are the devices that are connected to the internet without any human intervention and LoRa is the best to serve this purpose. E.g.- Radiation levels, air pollution etc. LoRaWAN is Low Power Long Range Wide Area Network. LoRaWAN is one platform serving all applications. LoRa is a disruptive wireless long range technology. Lora works in nW power range while 10-15kbps is the rate range.

Following points of LoRaWAN networks were discussed:
- Fully bidirectional system
- Standard protocol
- Secured (end to end)
- Easy commissioning
- Built- in mobility
- Network scalability

We were even briefed about the network architecture of LoRaWAN which consisted of connected sensors, network operators and the user. Mr. Abhay then

gave a brief description on ADR (Adaptive Data Rate) and why is it good for end devices and sensors.

Towards the end of the session Mr. Abhay enlightened us about how LoRaWAN is useful for an EXTC graduate and also gave us a few ideas for our projects which can be implemented using LoRa.

Feedback :

Soumyaprakash Choudhury (BE EXTC)

The recent talk based on LoRaWAN was very insightful was us as engineering students as we got to know about another unique and undiscovered aspect of WAN giving us a future scope for improving, understanding and applying this wonderful technology in various fields, most importantly in our day to day lives.

Sumantu Powale (TE EXTC)

LoRaWAN was very informative session where we came across new technology. Mr. Abhay gave us an idea that how small things in our day to day life can be made easier by just using a small chip. Also, it was very productive in sense of our engineering projects. I personally gained a lot of technical knowledge from this session.

Event Photographs:

Vote of Thanks: Mr.Arnold Sequeira (TE EXTC)

Report Prepared by: Ms. Shraddha Sharad Naik (TE EXTC)

Report Approved by: Ms. Gejo George – IEEE-DBIT SB Counselor