

Internet of Things and the Smart Home

Abstract

The Internet of Things (IoT), refers to the billions of physical devices around the world that are now connected to the internet, all collecting and sharing data. Thanks to the arrival of super-cheap computer chips, microcontrollers, sensors, actuators and the ubiquity of wireless networks, it's now possible to turn anything, from something as dumb as a chair to a whole facility of plant into a part of the IoT.

Connecting up all these different objects and adding sensors to them adds a level of digital intelligence to devices, enabling them to communicate real-time data without involving a human being. The Internet of Things is making the fabric of the world around us smarter and more responsive, merging the digital and physical universes.

The talk will broadly cover the following:

- What is the Internet of Things (IoT)?
- Where does the Internet of Things sit in the broad sweep of things?
- Applications of IoT
- Smart Home as a popular application of IoT.
- World of Makers – DIY applications
- Human-centric and Living Services
- Privacy and Security

Brief Bio of Speaker



Anshu Prakash Murdan is a Senior Lecturer in the department of Electrical & Electronic Engineering at the University of Mauritius. He has been actively involved in a number of IoT based projects aiming at utilizing low cost microcontrollers and sensors for smartening the workplace. He has a number of publications, research projects and consultancy projects in the field of IoT. He is currently working on GPS tracking of buses, IoT based data collection and analytics system and IoT based energy management and control. Anshu has also serviced two short courses for industry: Introduction to Microcontrollers using the Arduino and Internet of Things implementation using microcontrollers. Besides IoT, Anshu is also working on Energy Management for improving the energy efficiency of buildings in Mauritius. In particular his projects identified, formulated and evaluated energy saving opportunities in these buildings. He is currently the Smart Grid Technical Expert for Mauritius Renewable Energy Agency (MARENA), as well as member of its Technical Advisory Committee. Anshu has also been a Member of MRC Steering committee for hands-on Training Workshops on Robotics.