

A Hands-on Introduction to the Internet of Things (IoT)

Why should you attend this 2-day course?

According to Gartner, there will be 20 billion connected devices on the planet by 2020. These connected devices, sometimes referred to as Internet of Things (IoT) range from personal gadgets like mobile phones and wearables to home appliance and automobiles. As industries rely more and more on automation, we will see industrial equipment rely more and more on sensor data.

This introductory course will give attendees an introduction to the exciting field of Internet of Things. We will start with a gentle introduction, understand the architecture of an IoT application and build working prototypes for different industries. We will also discuss the pertinent legal, ethical, security and data governance issues.

What you will learn?

- **Introduction to IoT**
 - How is the current landscape of IoTs and what lies in the near future?
 - Understand the architecture of an IoT application. Sensors, hardware, communication, networking, security, data formats, protocols, and data processing
 - How data flows in data pipeline – Ingestors, Stream Processors, AWS, Azure, etc.?
 - What are the possible security, privacy, encryption issues with the IoTs?
 - Innovation in artificial intelligence, sensors, and IoT chips
 - Ethical, legal and governance issues in IoTs
- **Hands-on real-world practical application:**
 - Real-time analysis of a simulated credit card data stream
 - Real-time sentiment analysis for Twitter stream
 - Real-time analytics on motion sensing data emitted by a smart phone
 - Attendees pick an IoT application from the following tracks:
 - **Agriculture:** Real-time monitoring of humidity, temperature, and light from soil
 - **Transportation:** Real-time tracking of an automobile location
 - **Industrial automation:** Real-time monitoring of machine health
 - **Surveillance:** Real-time activity monitoring

Who should attend?

This 2-day course is open for all working professionals who want to get hands-on, real-world, practical learning on IoTs.

Program Requirements

You should have an interest in data science and data engineering. Having programming experience is not a pre-requisite for enrollment in this course.

Instructors

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