

IoT and Blockchain Training

Course Summary

Description

In this Internet of Things (IoT) and Blockchain training you will learn more about two of the most exciting paradigms in emerging technology. This one day training will cover not only an overview of IoT and Blockchain, but how Blockchain holds the potential to securely unlock business and operational value of IoT to support common tasks, such as sensing, processing, storing information, and communicating.

Topics

- What is IoT?
- How does IoT work?
- Current IoT Landscape
- IoT Design Standards
- IoT Design Questions
- IoT Architecture
- What is Blockchain?
- How does Blockchain work?
- IoT / Blockchain

Prerequisite

There are no prerequisites for this course.

Duration

One Day

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Course Outline

- I. **What is IoT?**
 - A. Internet of Things Overview
 - B. IoT History
- II. **How does IoT work?**
 - A. Components of an IoT device
- III. **Current IoT Landscape**
 - A. Growth areas:
 - B. Privacy concerns
- IV. **IoT Design Standards**
 - A. Zigbee networking protocol
 - B. Thread Group
 - C. AllSeen Alliance/AllJoyn
 - D. Open Interconnect Consortium/IoTivity
 - E. Industrial Internet Consortium
 - F. ITU-T SG20
 - G. IEEE P2413
 - H. Apple HomeKit
- V. **IoT Design Questions**
 - A. Questions to help you design an IoT solution
- VI. **IoT Architecture**
 - A. Stage 1 - Data Generation (Sensors / Actuators)
 - B. Stage 2 - Data Acquisition Systems
 - C. Stage 3 - Edge Processing
 - D. Stage 4 - Long-Term Data Storage / Blockchain
- VII. **What is Blockchain?**
 - A. History of Blockchain
- VIII. **How does Blockchain work?**
 - A. Benefits of Blockchain
 - B. Blockchain vs. conventional technology
- IX. **IoT / Blockchain**
 - A. Benefits of adding Blockchain to IoT
 1. Trust Building
 2. Cost Reduction
 3. Accelerate Data Exchanges
 4. Scaled Security for IoT