

abhisam

IIoT Workshop



Industrial Internet of Things Training
Workshop, Mumbai

March 9-10, 2018

Industrial Internet of Things (IIoT) Workshop

Introduction

The Internet of Things (IoT) is an emerging technology that is set to transform our entire economy & way of life in the coming years. The IoT will have both Domestic (consumer) and Industrial (Business / Enterprise) versions. The Industrial version of the IoT is called the IIoT (Industrial Internet of Things) and will be nearly 70% of the IoT by value by some estimates. This workshop aims to bring you up to speed with this new technology, so that you can participate in this ecosystem and benefit.

About the Workshop

The Abhisam IIoT Workshop has been developed by industry experts having cumulatively more than hundred man years. of experience in Industrial Automation, Control Systems and Business Enterprise IT Systems. This workshop is not the run of the mill IoT hobbyist workshop. It is meant for industrial and business professionals who wish to come up to speed with this new technology.

About Abhisam

Abhisam Software is a leading global creator and provider of training courses including e-learning software based training, as well as hands on classroom style workshops on technical subjects including on RFID (Radio Frequency Identification), Fieldbus, Safety Instrumented Systems, Hazardous Area Instrumentation and more.

For more details please visit <http://abhisam.com>

Abhisam IIoT Workshop Outline of Topics

The Abhisam IIoT workshop will be a blend of theory and practical hands on sessions, that aim to bring you quickly, up to speed with IIoT technology. The following is a brief outline of the workshop.

Module 1- Basic Concepts

- Introduction to IoT- Background & History
- How is IIoT different from plain vanilla IoT?
- Challenges facing IIoT due to the I part
- Types of Sensors, Transmitters, Control Systems & Actuators
- Introduction to RFID Technology & its role in IoT
- Characteristics of Industrial Devices-
- Traditional Data Acquisition & Control Architectures- PLC/DCS/SCADA/SIS
- Changes in legacy architectures due to IIoT
- Industry 4.0 Concepts

Module 2- IIoT Architectures

- Understanding Industrial applications
- Designing viable IIoT Architectures
- Machine Automation applications versus Process Automation applications
- Field Devices in IIoT
- Connecting legacy I/Os – Analog 4-20 mA, Fieldbus, Wireless devices and Gateways
- Communication Protocols (including OSI Model and TCP/IP, MQTT, HTTP, REST)
- Cybersecurity Considerations- Authentication, Encryption, Security Certificates, SSL

Module 3- IIoT Platforms

- Characteristics of IIoT platforms- Open Source, Third Party or Dedicated
- What is the Cloud? Why use it? Fog, Private Cloud & Public Cloud
- Digitalization & Virtualization
- Digital Twin Concept
- Using Microsoft Azure as an IIoT platform- practical exercise
- Using AWS as an IIoT platform
- Using other platforms such as SAP Leonardo & IBM Bluemix / Watson
- Using special dedicated IIoT platforms

- Analytic applications and Dashboards

Module 4- IIoT Standards & Interoperability

- Need for Common Taxonomy & Framework/Rules
- Developing Standards & Practices
- CENELEC/ IEC / ISO IEEE & ISA status on Standards
- Challenge of interoperability

Module 5-Practical Demo 1

- Building an IIoT Device
- Developing Specifications
- Selecting Field devices & the platform
- Configuring programs & parameters
- System integration & testing

Module 6-Practical Demo 2- Predictive Maintenance application

Module 7-Practical Demo 2- Analytics Application

Q & A Session

Faculty

The Workshop will be conducted by a group of experts, led by Mr. Anand Iyer, B.E. (Instrumentation) who has worked in various industries in India, the Middle East and the US in various areas and roles. Prior to working with Abhisam, he has more than 25 years of experience in Automation, Control and Safety Systems in several leading companies including Emerson, Petrofac, McDermott and others. His recent interests include developing solutions utilizing the Industrial Internet of Things including a Flare bot and a Water bot.

Certificates

All participants who attend the complete workshop on both days will get a printable Certificate of Participation with a unique ID number from Abhisam.



Fees

Course Fee is Rs.9,000/- plus GST@18%. (Group Discount of 10% for 3 or more participants is available).

A limited number of Early Bird discounted seats are available at Rs.7,990/- plus GST@18%

Inclusions: Training, Training Material, Certificate and Lunch/Tea/Coffee on both days

Exclusions: Travel, Stay and everything not mentioned in Inclusions.

Payment and Registration for the course is exclusively via Explara at the link below.

<https://in.explara.com/e/industrial-internet-of-things-iiot-workshop>

Eligibility

Any technical qualification and/or industry experience. Must be familiar with basic programming & networking concepts.

Other Requirements

Desirable to bring own laptop and Internet dongle (or use own mobile as hotspot), to practice exercises as demonstrated by faculty. May need own Credit Card for opening free trial accounts with IoT platform vendors to practice. Course Fees do not include platform fees that may be charged by providers such as Microsoft or Amazon beyond their free trial and learners have sole responsibility for this.

Venue

Hiranandani Gardens, Powai, Mumbai.

Disclaimer

Abhisam reserves the right to modify/change the program outline /contents, based on current technology developments and audience composition. or to cancel/ postpone the event in case minimum number of participants do not register. Alternatively, venue may be changed (within Mumbai) if number of participants is more. Abhisam has no connection with the vendors named here such as Microsoft, IBM, Amazon and others, nor is an affiliate/reseller of any of these entities, nor does Abhisam endorse any particular vendor. Information about their products and services is provided for educational use only and the decision to use any provider is left to the learners own judgement. Standards may have be purchased from bodies such as IEC and others by interested learners. Abhisam training workshops are vendor neutral.

More Information

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