

PROPOSAL

FOR

2 Days

Workshop on Internet Of Things (IOT)

www.ipersonality.in



Workshop Highlights

- What "the Internet of Things" means and how it relates to Cloud computing concepts
- How open platforms allow you to store your sensor data in the Cloud
- The basic usage of the Arduino environment for creating your own embedded projects
- at low cost.
- How to connect your Arduino with your Android phone.
- How to send data to the Internet and talk to the Cloud.
- How to update sensor readings on Twitter (Social Networking Sites).
- Control a Relay Switch by texting from your Phone.

Course Content

Day 1

Introduction to the Internet of Things

- The Internet of Things
- The Basics of Sensors & Actuators
- Basic IOT Architecture

The Arduino Platform

• The Arduino Open-Microcontroller Platform

- Arduino Basics
- Arduino Board Layout & Architecture
- Reading from Sensors
- Programming fundamentals (C language)
- Arduino Programming & Interface of Sensors
- Interfacing sensors with Arduino
- Programming Arduino
- Reading from Sensors

Project 1: Simple LED Program for Arduino

Project 2: Integrating Sensors & Reading Environmental Physical Values.

Project 3: Reading Environmental Values on Android Smartphone.

- Talking to your Android Phone with Arduino
- Connecting Arduino with Mobile Device.
- The Android Mobile OS.
- Using the Bluetooth Module

Project 4: Voice Controlled Mini Home Automation using Android Smartphone Project 5: Control Devices using Local host Web Server for Home Automation.

- Integrating Ethernet Module & Testing DHCP Connection
- Creating Program for Local host Web Server for controlling devices.

Day 2

Project 6: Being Social on Twitter & update status on Twitter through Arduino

• Make Electronics Gadget Talk to Internet

- Integrating Ethernet Module
- Creating App on Twitter

Project 7: Send Voltage& Analog Data on Cloud Server.

- Cloud Computing
- Communicating with the Cloud using Web Services. □□□
- Cloud Computing & IoT.
- Popular Cloud Computing Services for Sensor Management.

Project 8: Use Arduino to Upload free data from Environmental Sensors to Cloud Server.

Project 9: Automatically Tweet Sensor Data on Twitter.

Project 10: Receive Automatic Call Notification on Mobile Phone for Burglar Alarm using IoT Platform.

Project 11: Control Electronic Devices from anywhere across the world using Internet & Mobile App.

Benefits of Participants:-

- 1. Build your own IOT Device and get IOT Certified.
- 2. Understanding IOT and its business
- 3. End to End IOT Architecture
- 4. Sensors and Embedded Systems
- 5. Hardware & Software Development Platform for IOT
- 6. All network protocols for IOT (to connect devices)
- 7. Cloud, Web Services, Big Data, Big Data Analytic and Visualization
- 8. Practical for all above mention topics
- 9. Individual KIT for each Team
- 10. Get your hands dirty with hardware and create your own IOT Devices

11. Understand the concept behind smart cities, smart wearable's &smart switches.

Output of 2 Days Training Program:-

- Students will be confident and capable to build their own IOT devices.
- Attendee will be capable of designing any application by integrating multidisciplinary concepts and can understand all the process of smart products like smart switches, smart watches, smart meters etc.
- Participants can choose their career in IOT field and can publish their papers in
- International/National Journals.
- Students will be ready for the 21'st century's workshop

Eligibility:

There are no prerequisites for joining this workshop. Anyone interested, can join this workshop. While a basic C Programming would be helpful, it is not compulsory. Student from Electronics, Electrical, Instrumentation, CS/IT any branch student can attend this workshop.



COMPANY PROFILE

iPERSONALITY is an educational organization committed to improve a student's potential by upgrading existing community resources to provide appropriate physical, psychological and social support. Its primary focus areas include Workshops & training in all domains as well as provide the students with every bit of help so as to make them grow professionally and intellectually.

iPERSONALITY developed a vision to provide professional education services for development of the major section of the prospering India and increase the empowerment by introducing a unique concept of Self-Branding. Today, it is one of the fastest growing Education and Training based startup with corporate office in Lucknow. We also provide workshops and seminars in colleges and schools on current technologies in order to make students updated and skilled for today's industrial world.

Educational Services:-

Workshops, seminars, trainings & project developments have become a crucial part in the academics as well as practical scenario of technology and we provide this opportunity to every single student of every college or university. We polish & smoothen the learning skills of the students & rather making the students a good learner we also make them a good thinker & a creator. We emphasize on Quality and understand the importance of imparting Quality Technical Education in creating competitive advantage. Workshop provides the students with the advantage of gaining real-world experience with the actual organizational culture of an environment and also with industrial projects.

Our Mission:

To promote the cause, education and knowledge of science and technology, through certifications, certificates, events, training and memberships for individuals, corporates and educational institutes.



CORPORATE PARTNERS









Sample Certificate:



NOTE: This is a sample certificate only, we can change the certificate as per the requirements and as per the type of courses.



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