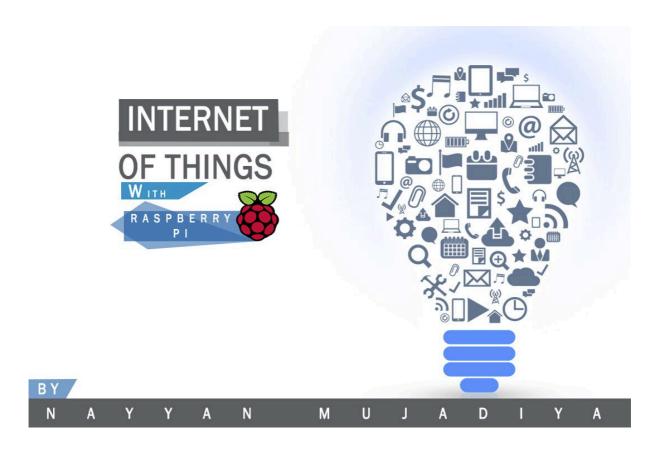


Internet of Things with Raspberry Pi by Nayyan Mujadiya

quick start your IoT prototype

IIIT-Hyderabad Alumni



The Internet of Things is ushering a new era in science and technology which will forever change our personal, professional lives, our consumer habits and the way we do business. With the rapidly changing world, these latest inventions and innovations will become the norm by 2022, and we expect more than 50 billion connected devices communicating via the net. In order to create early adopters, we are introducing a one of its kind course on 'Internet of Things', the next big thing in the IT industry.

Key Features of Course:

Hands-On sample projects

Post completion of the course, you will be able to:

How to develop and implement IoT technologies, solutions, and applications. IoT Device Design like- sensors, Embedded development boards, Interfacing peripherals & Programming GPIOs & Design Considerations.

Programming Python

What will you learn? (30% Theory, 70% Hands-on)

- What is IoT?
- Headless start of Raspberry Pi.
- Introduction to Raspberry Pi.
- Introduction to OS & NOOBS.
- Introduction to Sensors.

- Linux Basics.
- Introduction to Python.
- GPIO on Raspberry Pi.
- Git on Raspberry Pi.
- Interfacing different Sensors using Raspberry Pi (Python)
 - LED
 - Switch
 - Buzzer
 - LDR
 - PIR
 - Ultrasonic Sensor
 - DHT11
 - Servo Motor (GUI Control)
 - LCD Display (Optional)
 - Data logger example
- Introduction to Plotly & uploading sensor data.
- Interfacing Arduino
- Working with NodeMCU (ESP8266) (Optional)
- AWS and Raspberry Pi. (Optional)
- Simple Projects

Kit

~ We will provide Raspberry Pi Kit for doing Hands-On

Pre-requisites

Curiosity to learn the IoT.

Software Requirements

Computer system with **2 GB RAM** min. | **2 Mbps** Internet Surfing Speed

Facilitators' Profile

Nayyan Mujadiya teaches Python, IoT, Machine Learning, Programming for Kids He is working as R&D Engineer with leading EDA company. He has conducted more than 60 Workshops. He did his B.Tech in Information Technology from DDU, Gujarat and MS by Research in CSE from IIIT-Hyderabad. You can find more about his at https://nayyanmujadiya.in/ and tweet him at @nayaneye.

Other Course & Workshops

- 1. Python for Automation.
- 2. Data Structure and Algorithm with Python.
- 3. Python Data Science.
- 4. Internet of Things with Raspberry Pi Hands-On.
- 5. Internet of Things Case Studies- Hands-On.
- 6. Industrial Internet of Things Hands-On.
- 7. Hands-On Machine Learning with Scikit-Learn and TensorFlow.
- 8. Computer Vision using Raspberry Pi.
- 9. Programming for Kids.
- 10. Physical Computing with Raspberry Pi for Kids.