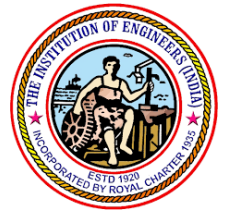




**Engineering Staff College of India**  
*Autonomous Organ of The Institution of Engineers (India)*  
(An ISO 9001:2015 Certified, AICTE & CEA Recognized Institution)  
Old Bombay Road, Gachibowli, Hyderabad, Telangana – 500 032, India



## Internet of things (IoT) Data Analytic



## Industrial Training cum Internship on INTERNET OF THINGS (IOT) DATA ANALYTICAL



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## Introduction

Organizations are gathering huge volumes of information from all kinds of connected objects, such as data about how consumers are using certain products, the performance of corporate assets, and the environmental conditions in which systems operate. Organizations are witnessing a rise in huge amounts of data. With the growing demands of the usage of innovative approaches of Information Technology, organizations tend to look towards the integration of modern technological trends into their day to day to routines. The growth of the Internet of Things (IoT) is having a big impact on lots of areas within enterprise IT, and data analytics is one of them. The Internet of Things (IoT) is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers (UIDs) and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

Analytics for Internet of Things analytics refers to analyzing and examining the data obtained by the Internet of Things. Sensors, network end devices and other data storing and transmitting equipment are the key components of collection of Internet of Things data, upon which analysis is performed. By applying advanced analytics to these incoming streams of data, organizations can gain new insights that can help them make more informed decisions about which actions to take.

## Industrial Training Objectives

- Understand the variety of transmission protocols for IoT along with their strengths and weaknesses
- Learn how data flows from the IoT device to the final data set
- Develop techniques to wring value from IoT data
- Gain in-depth knowledge of IoT applications and can build your own end-to-end solutions.
- Use machine learning as a predictive method on IoT data
- Implement best strategies to get the most from IoT analytic

## Industrial Training Coverage

- Introduction to internet of things (IOT)
  - Defining IoT Analytics and Challenges
  - Business value concerns
- IoT devices and Networking Protocols
  - IoT Devices
  - Basics of Networking
  - IoT networking connectivity protocols
  - Data messaging protocols
- IoT Analytics for the Cloud
  - Introduction to elastic analytics
  - Cloud Security and analytics
  - Overview of AWS
    - Creating an AWS Cloud Analytics Environment
- Data Collection Strategies and Techniques
  - Data processing for analytics
  - Exploring and visualizing IoT Data
  - Adding internal and external dataset
  - Using R for predictive modeling
  - Big data technology for storage
  - Designing visual analysis for IoT data
  - Creating and visualizing alerts
- Data Science for IoT Analytics
  - Machine Learning
  - Anomaly detection using R
  - Forecasting using R
  - Working with Deep Learning
  - Managing data lakes

## Internship Details:

**Duration:** 2 Weeks Hands - on Training + 2 Week Project Development

**Venue:** Online

**Fee:** Rs.4500/- (Inclusive of 18% GST)

**Assessment & Certificate:** ESCI and Technology Partner

**Internship Dates -** 09 May - 04 Jun 2022    06 June – 02 July 2022    04 – 08 July 2022