

# Electronics & ICT Academy

IIT Roorkee

## FACULTY DEVELOPMENT PROGRAM

on

### "Big Data with Hadoop"



In Association with

Krishna Engineering College



Jun 11, 2018 - Jun 16, 2018

### Experts from Academia/Industry

Kovid Academy  
Hyderabad

Guest Lecture  
IIT Roorkee

Supported by

Ministry of Electronics & Information Technology  
Government of India

### Venue

Krishna Engineering College  
95, Loni Road, Between Mohan Nagar  
and Air Force Station-Hindon  
Ghaziabad (Uttar Pradesh)

## Why Big Data?

Big data is a term that describes the large volume of data – both structured and unstructured – that overburden a business on a day-to-day basis. It is the combination of these factors, high-volume, high-velocity and high-variety that serves as the basis for data to be termed Big Data. This course is designed for data analysts, business intelligence specialists, developers, system architects, and database administrators. This course provides participants with a comprehensive understanding of all the steps necessary to operate and maintain a Hadoop cluster using Cloudera Manager.

## Benefits and Outcomes of the Course

- The course provides participants with a comprehensive understanding of all the steps necessary to operate and maintain a Hadoop cluster using Cloudera Manager.
- With Spark, developers can write sophisticated parallel applications to execute faster decisions, better decisions, and interactive actions, applied to a wide variety of use cases, architectures, and industries. Apache Spark examples and hands-on exercises are presented in Scala and Python.

## Program Features

- The program is split into lectures and labs/hands-on sessions.
- Hands-on experience on basic and advanced-level topics.
- Interaction & learning with experts from academia & industry.
- Certificates to participants by E&ICT Academy IIT Roorkee.

## Objective of the Course

- To apply traditional data analytics and business intelligence skills to big data tools like Apache Impala (incubating), Apache Hive, and Apache Pig.
- Cloudera present the tools data, professionals need to access, manipulate, transform, and analyze complex data sets using SQL and familiar scripting languages.



## Focus Areas

- Introduction to Hadoop.
- Hadoop Distributed File System (HDFS).
- MapReduce and Spark on YARN.
- Hadoop Cluster Installation.
- Getting data into HDFS.
- Hadoop clients including Hue.
- Processing complex data with Pig.
- Multi-Dataset operations with Pig.
- Introduction to Hive and Impala.
- Complex data with Hive and Impala.
- Apache Spark Basics.
- Aggregating data with pair RDDs.
- Writing, Running & Configuring Apache Spark.
- Parallel Processing in Apache Spark.
- Data-Frames and Spark SQL.
- Message processing with Apache Kafka.
- Capturing data with Apache Flume.

## Coordinators

Dr. Sanjeev Manhas  
P.I. E&ICT Academy  
IIT Roorkee

Dr. Pramod Kumar  
KEC, Ghaziabad

## Who Can Attend ?

Program is open to faculty members/research scholars/PG students from colleges/universities, and industry personnel working in the concerned/allied discipline.

## Registration Fee

Faculty members: ₹ 2,500/-

Research scholars: ₹ 2,500/-

Persons from Industry: ₹ 3,000/-

## Payment Details

DD in favor of "Dean SRIC IIT Roorkee" payable at Roorkee  
"OR"

Make Online Payment by NEFT/RTGS on given detail

Account Name: Research Project, IIT Roorkee

Account Number: 33012172097

IFSC code: SBIN0001069

## How to Apply

Step 1: Participants may fill the registration form available on the link "Apply Here" for the relevant course on [eict.iitr.ac.in](http://eict.iitr.ac.in)

Step 2: Make Payment

OR

Step 3: Send a duly filled-in registration form along with Demand Draft to Academy address.

Mr. Prateek Sharma, EICT Academy, ECE Department, IIT Roorkee-247667

## Important Dates

Last Date For Online

Registration :

05th June 2018

## EICT Academy IITR

Electronics and ICT Academy (E&ICT) at IIT Roorkee (funded by Ministry of Electronics and Information Technology) aims to enrich and upgrade teaching and research competences of engineering faculties of institutes/colleges by conducting courses and workshops in fundamentals as well as emerging areas of E&ICT and enabled areas. The programs are conducted by well-known industry partners, resource persons from leading academia and experts from renowned R&D organizations.



## Activities of the Academy

- Specialized training on basic and advanced level topics with hands-on experience in the emerging areas of Electronics & ICT.
- Setup the activity centers to conduct FDPs locally at institutes/colleges.
- Curriculum development for the industry.
- Continuing Education Programme for students/working professionals.
- Design, develop and delivery of specialized modules for specific research areas in industry.

Faculty Development Program  
on

## Big Data with Hadoop

Jun 11 - Jun 16, 2018

## REGISTRATION FORM



Applicant Name \_\_\_\_\_

Gender: \_\_\_\_\_

Category (GEN/OBC/SC/ST): \_\_\_\_\_

Designation: \_\_\_\_\_

Name and Address of the  
Organizatio/Institute: \_\_\_\_\_

City/Town: \_\_\_\_\_

Email: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Do you need Accommodation?  
(Yes/No): \_\_\_\_\_

DD Number: \_\_\_\_\_

Date: \_\_\_\_\_

Issuing Bank: \_\_\_\_\_

Payable at: \_\_\_\_\_

Signature of the Applicant

## Contact Us

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