



## CSIR-National Institute of Science Communication and Information Resources (CSIR-NISCAIR)

### Short Term Training on "Data Science"

May 21-25, 2018

#### About NISCAIR

National Institute of Science Communication and Information Resources (NISCAIR) is one of the premier institutes of CSIR serving the society using modern IT infrastructure. NISCAIR, since its inception, has been laying emphasis on reaping the benefits of information technology to effectively serve the national and international community to be an institution of international standard and repute in the areas of knowledge networking, databases on natural resources, science communication, science popularization and S&T information management systems and services. CSIR-NISCAIR hosts a state of the art DIRF Data Centre (ISO/IEC certified).

#### About Course

**Data science**, also known as data-driven science, is an interdisciplinary field about scientific methods, processes, and systems to extract knowledge or insights from data in various forms, either structured or unstructured, similar to data mining.

Over the last few years Data Science has really changed our concept of technology. We see our lives a lot easier as compared to 10 years ago, and this is all because of data science. Data Science has really pulled the ends between fiction and technology. Right from LinkedIn to Tinder, data science is being used everywhere.

Data Science is successfully adding value to all the business models by using statistics and deep learning to make better decisions and improve hiring.

#### Broad Course Content:

- Introduction to Data Science
- Machine Learning Basics - Supervised, Unsupervised; Machine Learning using Neural Networks
- Basics of Data Pre-processing, Data Clustering & Classification
- Regression Analysis and its Application
- Textual Data Analysis, Sentiment Analysis- Emotion and Polarity Analysis
- Data Analysis and Machine Learning using R.
- Introduction to Hadoop
- Hands-On Tutorials: Apache Hive- Processing data on Apache Hive: Creating tables, loading data in tables, Creating query to Join two data sets.
- Introduction to Apache Pig, Exploring Pig User Interface, Hands-On Tutorials: Apache Pig, Create a Script in Apache Pig for Loading dataset, Create filters, Grouping data
- Introduction to Apache Spark, Hands-On Tutorial on Apache Spark

Interested Academicians, R&D personnel, Data Analyst, Information Scientists, Science Communicators, students may send their application to [training@niscair.res.in](mailto:training@niscair.res.in)

Resource persons for the course will be from IIT, New-Delhi & CSIR-NISCAIR

The course Fee for Indian participants Rs. 5,000 (Without Accommodation) and Rs. 7,500 (With Accommodation) is to be paid through NEFT / RTGS/ ECS only to NISCAIR bank account (Details available on [www.niscair.res.in](http://www.niscair.res.in))

Participation Certificate will be awarded after successful completion of training.

#### For more details Contact:

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Mr. Salim Ansari , Sr. Technical Officer (7838149298)

#### Venue

CSIR-NISCAIR, Vigyan Suchna Bhawan, 14 Satsang Vihar Marg,  
New Delhi-110067

**Last Date of application : May 15, 2018**