Workshop on

Data Mining and Business Analytics

Conducted by

Indian Statistical Institute, Hyderabad

and

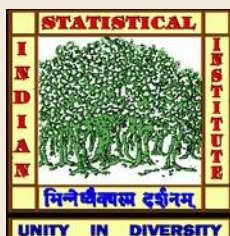**National Institute of Technology (NIT), Sikkim**

16th to 19th November 2016 (4 Days)

Venue and Timing

Lecture Hall
National Institute of Technology
Ravangla, South Sikkim
(0900 to 1630)

Registration

10th Nov. 2016 : Last date for submission of filled registration form to gmuralirao@gmail.com

12th Nov. 2016 : Last date for Confirmation of Registration

Chief Patron
Prof. Sanghamitra Bandyopadhyay,
Director, ISI, Kolkata

Patron
Prof. Arun Baran Samaddar,
Director, NIT, Sikkim

Contact Persons

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About the Workshop

This introductory workshop **ONLY** for Participants from **North Eastern States is** being organized a t NIT, Sikkim with an objective to help Faculty Members, Researchers and Professionals of North-Eastern States to acquire the theoretical as well as applied knowledge on Data Mining and Business Analytics to enable them to transfer/apply the knowledge in their respective fields in an effective manner. In this age of advancing technology, internet, e-commerce, e-governance, digitation etc., large volumes (petabytes) of data are being generated. These large and complex data (BIG DATA) cannot be processed efficiently using traditional methods & tools. Challenges in analysis include understanding, cleaning, searching, visualization, mining, modelling, prediction etc. Statistical Methods, both advanced as well as simple provide excellent techniques to analyze big data efficiently.

Workshop Coverage (Indicative not Exhaustive)

Introduction to Big Data, Different approaches of Data Mining and Analytics, Basics of Data Mining and Business Analytics, Exploratory Data Analysis (visualization/Graphical Methods), Descriptive Analytics, Basic & Advanced Statistical Methods, Regression Modelling, Predictive Analytics, Resampling Methods, Supervised and Unsupervised Learning, Multivariate Analysis CAR&T, Market Basket Analysis (Association Rules), Time Series Models, Machine Learning Techniques, Prescriptive Analytics etc.

Venue : National Institute of Technology (NIT), Ravangla Sub-Division, South Sikkim - 737 139
Location: Presently, the institute is located at Ravangla, Barfung Block in southern district of Sikkim.
Connectivity: The New Jalpaiguri (NJP) Railway Station and Bagdogra Airport are 113 and 106 km away from the Campus respectively. The participants may reserve car from NJP or may reach by shared car and bus from SNT bus stand, Siliguri.

Eligibility : Faculty Members, Scientists, Research Scholars, Government and Industry professionals working in data analytics and related areas. (Students - PG, UG etc. are **NOT** eligible for the workshop)

Faculty : The workshop will be conducted by Senior Faculty members of Indian Statistical Institute with over 30 years of experience in teaching, research and providing advisory service to Government, Scientific and Research Establishments, Industry etc.

Travel, Stay & Local Hospitality (Only for Outstation Participants of NE States) :
Selected outstation participants (other than Ravangla, Sikkim) will be paid II Class (Sleeper) Train/Bus return fare in the shortest route from residence or organization to the venue. Modest (twin sharing) Lodging & boarding facility will be provided to the selected outstation participants (who have opted for) near the venue. All selected participants (local and outstation) will be provided the workshop course kit, lunch & tea/coffee with biscuits during the workshop (16-19 Nov. 2016).

Registration : Mail the completed registration form (with attachments) as early as possible to

gmuralirao@gmail.com and dhananjaystripathi9@nitsikkim.ac.in

Last date for sending registration form : 10th November 2016

Selection will be based on suitability/eligibility and first come first served basis. Selected candidates will be intimated by mail on or before **12th Nov. 2016**

Organizing Committee:

Chief Patron	:	Prof. Sanghamitra Bandyopadhya, Director, ISI, Kolkata
Patron	:	Prof. Arun Baran Samaddar Director, NIT Sikkim
Adviser	:	Dr. S.G. Samaddar, Dept. of CSE, NIT Sikkim
Convener	:	Dr. Dhananjay Tripathi, Dept. of HSS, NIT Sikkim
Co-convener	:	Mr. Pankaj Kumar Keserwani, Dept. of CSE, NIT Sikkim

Indian Statistical Institute

The Indian Statistical Institute (I.S.I.), founded by Professor Prasanta Chandra Mahalanobis, grew out of the Statistical Laboratory set up by him in the Presidency College in Kolkata in the year 1931. In 1959, in recognition of the role of statistics as a key technology of the modern times and the importance of the Institute in the development and application of statistics, the Parliament of India enacted the Indian Statistical Institute Act, declaring it an Institution of National Importance. The Institute is now considered as one of the foremost centers in the world for training and research in statistics and related sciences. In keeping with this long tradition, the Institute has been engaged in developing statistical theory and methods and their practical applications in various branches of science and technology. The major objectives of the Institute, as given in its Memorandum, are

- To promote the study and dissemination of knowledge of statistics, to develop statistical theory and methods, and their use in research and practical applications generally, with special reference to problems of planning of national development and social welfare;

- To undertake research in various fields of natural and social sciences with a view to the mutual development of statistics and these sciences;

- To provide for, and undertake, the collection of information, investigation, projects and operational research for purposes of planning and the improvement of efficiency of management and production.

The Institute initiated the Quality Movement in India as early as 1947. Through its SQC & OR Division the Institute is providing assistance to Indian industry relentlessly since then to achieve high quality and productivity at an affordable cost.

National Institute of Technology Sikkim (NIT Sikkim)

NIT, Sikkim is one among the ten newly established NITs by the Government of India in 2010 under the Eleventh Five Year Plan.

Vision: India has the capability and the responsibility to offer the world science & technology essentially with sustainability, through philosophy, conscience and value system. NIT Sikkim will play its role.

Mission: To develop the students as "thinking engineers" by nurturing them in attaining and enjoying the technical and scientific excellence, global exposure and at the same time in beholding the philosophy and the values for India and the world as a whole.

SQC & OR Unit, Indian Statistical Institute, Hyderabad

The Statistical Quality Control and Operations Research (SQC & OR) Unit at Hyderabad of the Indian Statistical Institute was established in the year 1974 with the objective of helping industries in Andhra Pradesh and also industries of other states close to Hyderabad for promoting and propagating statistical and quality management methodologies. The SQC & OR Unit, Hyderabad is one of the major Units of the SQC & OR Division of the Indian Statistical Institute. SQC & OR Division was created by Professor Mahalanobis exclusively for helping the Indian industries in managing quality and productivity problems with the application of Statistical as well as Quality Management methodologies. Manufacturing, Automobile, Process, Service, Banking, IT, BPO & KPO industries, Research Institutions and Central & State Govt. Depts. have availed/availing the services of SQC & OR Unit Hyderabad. SQC & OR Unit, Hyderabad has immensely contributed to the SQC & OR Division's activities such as

- Playing a pioneering role in the Quality Movement in India and setting path for quality control and improvement activities for the Indian industries through promotion and applications of statistical and operations research methodologies.

- Serving the industries in India and abroad over the last five decades by providing training and consultancy on quality concepts and methodologies such as TQM, Taguchi Methods, Quality Function Deployment, Six Sigma, and Quality Systems.

- Collaborating and exchanging ideas with quality gurus. Some experts like Shewhart, Deming, Juran, Taguchi, Ishikawa, Ott, Tippet and Suda visited ISI at various points of time and interacted with ISI faculty.

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Data Mining and Business Analytics

16th to 19th November 2016 (4 days)

Venue : National Institute of Technology, Ravangla, Sikkim

<u>Registration Form</u>

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1. Name :

    Age :   Sex : M/F

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2.   Organisation/Institution :
         (Attach scanned copy of ID with Photo)

3.   Designation/Status :

4.   Department/Function :

5.   Highest Qualification :

6.   Years of Experience :

7.   Outstation Participants only :   Accommodation - Y/N   Travel – Y/N

8.   Residential Address :

         Email ID :   Mobile :

Briefly describe your research/publications and purpose of attending the workshop

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Signature with Date

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**Certified that the applicant Dr/Mr/Mrs/Ms .... is
a permanent employee/ faculty / research scholar of our Institution/Organization.
His/her application is hereby forwarded for participation in the above workshop.**

Date: **Name, signature
                                                              and seal of other competent authority
                                                        (VC/Principal/Director/Dean/Registrar/HOD)**

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To be submitted through <u>Email</u> to
<u>gmuralirao@gmail.com</u>   and <u>dhananjaystripathi9@nitsikkim.ac.in</u>

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