



Mar | 2024  
06-12

High End Workshop (Karyashala) on

# SAFETY DATA ANALYTICS APPLICATIONS IN MINING AND OTHER CORE INDUSTRIES

## Organized by

Department of Mining Engineering  
NITK Surathkal, Mangaluru – 575025

## ABOUT THE WORKSHOP:

The high-end workshop is an invaluable platform aimed at exploring and discussing the utilization of data analytics in promoting safety within the mining sector and other essential industries. This workshop brings together industry experts, researchers, safety professionals, and stakeholders to delve into the innovative applications of data analytics in enhancing safety measures. It focuses on leveraging data-driven approaches to mitigate risks, prevent accidents, and improve overall safety standards in high-risk environments.

## ABOUT NITK:

National Institute of Technology Karnataka, Surathkal is located in Mangalore City, Karnataka State, India. The Institute was established as Karnataka Regional Engineering College (KREC) in 1960, and upgraded as National Institute of Technology Karnataka (NITK) in 2002. NITK is a premier institution engaged in imparting quality technical education and providing support to research and development activities. NITK is recognized as an institute of national importance by an act of Indian parliament. NITK has carved a niche for itself among the best technical institutions in India. NITK has been consistently ranked among the twelve technical institutions in the country. Today, the institution offers 9 undergraduates, 27 post graduate and doctoral programs in all its 14 Departments and is making significant advances in R&D and outreach activities. NITK is probably the only institution in the country which can boast of its own beach.

## ABOUT THE DEPARTMENT:

The department since its inception in the year 1984 has carved a niche for itself in the areas of Research, Consultancy and Community Service. The department has well qualified faculty dedicated to applied research in the field of Mining Engineering with special emphasis on Mine Environment, Safety and Mine Planning, Rock Mechanics and Ground Control. The department offers an undergraduate programme, M. Tech (Research) programme and Ph.D. in Mining Engineering. About 36 undergraduate batches passed out from the department till date. They are serving in responsible and key positions in various organizations both in India and abroad.



**NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA**  
**SURATHKAL, MANGALURU - 575 025**



**Professor J. Maiti** is a highly esteemed faculty member at the Indian Institute of Technology, Kharagpur. His research focuses on occupational safety and health analytics, quality analytics, and the development of virtual reality-based accident modeling and simulation.

**Dr. Apurna Ghosh**, Curtin University Australia holds a Bachelor's in Mining Engineering, a Master's in Mine Planning & Design, and a PhD in Mine Safety. With over two decades of experience, he has been deeply engaged in teaching and research roles across multiple Australian and international universities. His teaching portfolio encompasses Mine Safety Management, Mine Planning and Design, Resource Estimation, and Mining Systems.



**Mr. Suryanshu Choudhury** possesses more than 20 years of extensive experience in the Mining Industry, specializing in commodities such as Limestone, Iron, Copper, Cobalt, Chromite, and Bauxite. He spent 6 years working on complex base metal deposits in Central Africa and an additional 3.5 years at SURPAC Software International (Now Geovia of Dassault System) in Hyderabad, India.

**Dr. Priyanka Shahane** possesses six years of diverse experience encompassing Teaching, Machine Learning Research, HR Management, Software Development, and Student Counseling. Her research contributions include the publication of 16 papers in various esteemed national and international journals, including IEEE, IJMTE, IRJET, JETIR, IJARESM, and IJRDT.



**Dr. Ashis Bhattacharjee** is former Professor of the Department of Mining Engineering and joint faculty of the CoE SEA of Indian Institute of Technology Kharagpur. He received his Bachelor's degree in Mining Engineering in 1980 and Master's degree in Industrial Engineering and Management in 1983 from IIT(ISM) Dhanbad. He was awarded the M.S degree in Operations Research from Florida Institute of Technology, Florida, USA in 1984 and Ph.D. from pen state University, USA.

(And More Speakers)

## Technical Themes for Workshop

Over the period of 6 days, in-depth deliberation of various aspect of industrial safety data analytics in relation to mine geotechnics will be covered by eminent and expert speakers. The themes of the workshop are:

- Computer Applications in Mine Safety.
- Data Science Applications in Safety Engineering.
- Occupational Health and Safety, Injury, Epidemiology, Safety Data Analytics.
- Mine Safety Analytics.
- Mine Environment and Safety Engineering.
- Environment Modelling using Soft Computing, GIS Application, GIS and Remote Sensing.

## Event Highlights

- Exposure to industrial best standards and practices.
- Advance tools and techniques in data analytics.
- 3-hours hands on training in various safety data analytics software.
- Case studies related to data analytics applications in health and safety.
- Excellent platform for collaboration and networking.
- Exposure physically to interact with the field experts.

## Registration process

Students of B. Tech. (Final Year), M Tech. and Ph.D. with specialization in Mining, Mechanical, Civil, Computer Science, Information Technology, Data Science, Artificial Intelligence, and related discipline from universities, colleges and industries are eligible to apply through the following link <https://forms.gle/WjQumJDeHtjrp5Cj9>.

### Important Dates:

- Online Registration: 19<sup>th</sup> February 2024.
- Last Date of Registration: 27<sup>th</sup> February 2024.
- Intimation to Participants: 1<sup>st</sup> March 2024.

**For first 25 students only the registration fee will be free based on the first cum first serve along with the candidate's merit and credentials.** Those participants will be provided with the traveling, lodging and boarding as per the SERB guidelines. Certificate will be provided to the candidates who attend at least 90% of the lecture.

Self-sponsored candidate can attend the event by paying the registration fee. Accommodation may be provided in the institution guest house based on the availability and on paid basis. The fee details are: **Students (Undergraduate, Post-graduate, Doctoral level): Rs. 2000/- + GST.**

**Industry Professional: Rs. 18000/- + GST.**

**For any queries contact: email id: [bkunar@nitk.edu.in](mailto:bkunar@nitk.edu.in); Ph. No.: +91 8884834907 (Faculty & Industry), +91 9908715649 and +91 9482122628 (Student inquiry)**



## Event Organizing Committee



Chief patron  
Prof. B Ravi



Chairman  
Prof. Harsha Vardhan



Convenor  
Dr. B. M. Kunar

## Student Secretaries



Mohith Bekal Kar



Sahas V Swamy



B. Shiva Kumar



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