

Workshop on <mark>Basics of MATLAB – Mathematics</mark> <mark>Date: 13th June 2018</mark>

Number of participants: 13 Mr. Kaliprasad Rath and Dr. Goutam Kumar Mahato

About Resource Persons

Kali Prasad Rath received his M. Tech. in Computer Science and & M.Sc. in Mathematics from Berhampur University. This is his 14th year at Centurion University of Technology and Management and his 21th year in the teaching profession. He is associated with qualitative study on theory of difference equations.

Dr. Goutam Kumar Mahato, received M.Sc. (Mathematics) from Vinoba Bhave University, Hazaribag and B.Ed. from Ranchi University, Ranchi in the year of 2006 and 2008 respectively. Awarded PhD, in the year of 2013, from Indian School of Mines, Dhanbad. Published 22 research papers in different journals of international repute. Participated and presented 16 research papers in various National and International Conferences/Seminars. Started career in teaching as a part time faculty in BIT, Sindri, Dhanbad. Presently working in Centurion University since 2013.

Mathworks and ELMAX Systems and Solutions (MATLAB) team

About the workshop

Engineers and scientists need a programming language that lets them express matrix and array mathematics directly. Linear algebra in MATLAB is intuitive and concise. The same is true for data analytics, signal and image processing, control design, and other applications.

Technical agenda of Data Science using MATLAB:

- Introduction to Data Science
- Working with different data & data visualization.
- Exploratory data analysis.
- Pre-processing of data, Transformation, feature engineering.
- Concept of data warehousing and data mining.
- Interpretation and Evaluation.
- Classification of Data Mining methods.
- Predictive modeling.
- Supervised & Unsupervised Machine Learning.

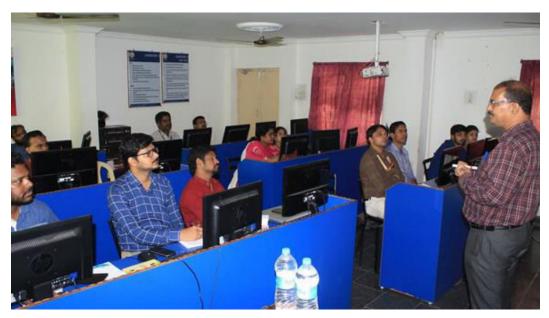
- Classification, Regression, Clustering ·
- Extraction and Association Analysis
- Integration of Keras & TensorFlow library with MATLAB
- Applications of Data Science in Medicine, Finance, Telecommunications, etc.
- Computational Methods for Big Data Analysis

Objectives:

- 1. Describe, analyse and model CPH-NEW or other research datasets.
- 2. Use descriptive statistics and plots for exploratory data analysis (EDA).
- 3. Fit probability distributions to data.
- 4. Perform hypothesis testing.
- 5. Apply basic regression and classification algorithms.
- Have the basic understanding on how to explore Statistics and Machine Learning Toolbox advanced methods (i.e. feature selection, regularization and other dimensionality methods).

Outcomes:

Able to use Matlab for interactive computations. Familiar with memory and file management in Matlab. Able to generate plots and export this for use in reports and presentations. Able to program scripts and functions using the Matlab development environment.



Discussion during the workshop Basics of MATLAB-Mathematics





WORKSHOP ON

Basics of MATLAB – Mathematics

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Organised by : Centurion University of Technology and Management

RESOURCE PERSON Mr. Kaliprasad Rath & Dr. Goutam Kumar Mahato

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Brochure of the session



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Attendance Sheet

	Mr. Pramod Saini	Howard them
ŝ	Dr. B. Narsimha Rao	B. Noiden
8	Mr. Sujit Mishra	-
9	Dr. Gouranga Ch. Mishra	Ghister .
8	Dr. Tanmoy Shankar	Jonary Shanne
8	Dr. Ashirbachan Mohapatra	As
	Dr. V. Narsimha Reddy	19 Dependy -
	Dr. K. Krishnam Raju	
8	Dr. K. S. Krishna Prasad	Arisher Reason
0	Dr. Sambid Swain	Saloid Sum
1	Mr. Avijit Biswas	- Howith Prisones
2	Dr. Amrutha Gupan	Donrithe Gugars - Sogar be Sugar
3	Dr. Sagarika Swain	Courte Sin

Rpatnait

Prabhat K. Pattnaik FDP Coordinator

Param

Dr. Prasanta Ku. Mohanty Dean Academic