

## BMS COLLEGE OF ENGINEERING

(Autonomous Institute, Affiliated to VTU)

Department of AI &DS & CSE (DS)

## Two-day Hands-on workshop on the topic Time Series Analysis (TSA)

Speaker - Mr. Boby John, Technical Officer, Indian Statistical Institute, Bangalore.

Date – 20th and 21st of November

Students – 5<sup>th</sup> Sem students of AI and DS and CSE (DS)

## Introduction to the speaker

Boby John is currently a Technical Officer at Statistical Quality Control & Operations Research (SQC & OR) Unit, Indian Statistical Institute, Bangalore. He received the PhD degree in Mechanical Engineering Sciences from Visvesvaraya Technological University, Belgaum and the Master of Technology degree in Quality, Reliability & Operations Research from Indian Statistical Institute, Kolkata. He is engaged in teaching and consulting in the fields of Six Sigma, Quality & Reliability Engineering, Business Analytics, Data Mining, Design of Experiments, Process Performance Modelling, Optimization, etc.

Boby has published around twenty papers in international journals and presented many papers in international conferences. He has also edited a book titled "Quality and reliability engineering: recent trends and future directions".

## **Topics Covered**

- Introduction to Time Series and Time Series Data
- Key Components of Time Series
- Overview of Autocorrelation and Partial Autocorrelation Functions
- Making Data Stationary Through Differencing
- Exploring time series data
- Exponential smoothing methods
- Autoregressive integrated moving average (ARIMA) models
- Intervention models and dynamic regression