

## **DA518 Exploratory Data Analysis and Visualization**

### **Instructor**

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### **Course description**

The goal for the course is to emphasise on the tools and techniques of visual business intelligence to help you make better use of your valuable information assets. Visualization is a tool to explore trends, relationships, confirm hypothesis, communicate findings and gain insight about data. This course will focus on teaching participants the principles and techniques for creating interactive visual representations from raw data in particular for quantitative analysis.

### **Topics covered**

- Techniques to Explore Data
- Tools for Exploratory Data Analysis
- Open Source Analytics Tools: R, Python
- Extrapolation of Data Analysis to Big Data, Techniques and Tools: Kafka and other platforms
- Data Visualization Techniques
- Open Source Data Visualisation Tools: Data Driven Document Library
- Writing your first data visualisation project with javascript
- Storytelling with Data

### **Textbooks**

None

### **Schedule**

Lectures: 2 three-hour slots per week

### **Grading**

- %30 Documentation + Presentation + Infographics
- %30 Hypothesis Testing
- %10 Static Visualisations
- %30 Dynamic Dashboard