

About Acclitics

Artificial Intelligence specialists with extensive experience in Machine Learning and AI values creation in telecom, finance, and health technology.

About Bootcamp

We provide concise, hands-on trainings to enable you to solve real-world business problems.

Format and Duration

- 30% Lectures and 70% Hands-on Labs
- Every Saturday and Sunday (3 weeks)
- Starting Jan 19th, 2019
- 10am— 4pm

About Instructor

(Dr. Sarmad Sohaib)

- Extensive background in machine learning, signal processing and information theory.
- Possesses several years of experience teaching and using machine learning.
- Co-founder of Acclitics.
- Holds a PhD from The University of Manchester, UK.
- Worked with Mobilink in early career.
- Tenured Associate Professor at University of Engineering and Technology.

Who Should Attend?

- Graduate students looking to start career in data science.
- Developers team who want to work in machine learning or artificial intelligence.
- Professionals who want to up-skill with practical application of machine learning.
- Executives and managers who need the vision and understanding of opportunities and costs

Course Outline

Fundamentals of Data Science, Probability and Statistics

- Introduction to probability and statistics for machine learning
- Introduction to Python
- Python stack for data science
- Data exploration and visualization
- Data preprocessing
- Feature engineering
- Machine learning fundamentals
- Hands-on lab

Classification Algorithms

- Perceptron
- Logistic regression
- Decision tree learning
- Metrics for evaluating classification models
- Best practices for model evaluation and parameter tuning
- Hands-on lab: building and evaluating classifiers

Regression Algorithms

- Linear regression
- Regularized linear regression
- Cross-validation using K-folds
- Hyper parameter tuning
- Metrics for evaluating regression models
- Hands-on lab: building and evaluating regression models

Unsupervised Learning

- K-means and K-means++ clustering
- Hierarchical tree for clustering
- DBSCAN clustering
- Hand-on lab: Using clustering

Ensemble methods

- Random forests
- Boot strapping, bagging and boosting
- Hand-on lab in clustering

Course Project

The participants will spend time building Churn Prediction project during the course.

