



Course Name: Machine Learning with Python

Number of Classes: 20

Per class Time: 1.5 hours

Total hour: 30 hours

Class Days: Thursday, Friday, Monday

Class Time: 8.30 pm to 10 pm

Course Fee: 5000 BDT (Up 28th February, 2018)

6500 BDT (After 28th February – 15th March)

Course Starts: 16th March, 2018



Course Outline:

1. Data processing
2. Simple Linear Regression
3. Multiple linear Regression
4. Polynomial Regression
5. Support Vector Regression (SVR)
6. Decision Tree Regression
7. Random Forest Regression
8. Evaluation Regression Models Performance
9. Machine Learning Classification models:
 - ✚ Logistic Regression
 - ✚ K-Nearest Neighbors (K-NN)
 - ✚ Support Vector Machine (SVM)
 - ✚ Kernel SVM
 - ✚ Naive Bayes
 - ✚ Decision Tree Classification
 - ✚ Random Forest Classification
10. Logistic Regression
11. K-Nearest Neighbours (K-NN)
12. Support Vector Machine (SVM)
13. Kernel SVM
14. Naïve Bayes
15. Decision Tree Classification
16. Random Forest Classification
17. Evaluating Classification Models Performance
18. Clustering
19. K-Means Clustering



- 20. Hierchical Clustering
- 21. Association Rule Learning
- 22. Apriori
- 23. Eclat
- 24. Reinforcement Learning models:

- + Upper Confidence Bound (UCB)
- + Thompson Sampling

- 25. Natural Language Processing
- 26. Deep Learning
- 27. Artificial Neural Network (ANN)
- 28. Convolutional Neural Network
- 29. Dimensionality Reduction

- + Principal Component Analysis (PCA)
- + Linear Discriminant Analysis (LDA)
- + Kernel PCA
- + Quadratic Discriminant Analysis (QDA)

30. Model Selection

- + K-Fold Cross Validation
- + Grid Search

31. XGBoost

