Machine Learning

Instructors:

Sudhanshu Kumar:

Having 8+ years of experience in Big data, Data Science and Analytics with product architecture design and delivery. Worked in various product and service based Company. Having an experience of 5+ years in educating people and helping them to make a career transition.

Curriculum:

Machine Learning Module 1

• Introduction machine learning module 1 Preview

• Supervised, unsupervised, semi-supervised, reinforcement

• Train, test, validation split

• Performance

• Overfitting, underfitting

• OLS

• Linear regression

• polynomial regression

• Assumptions R-square adjusted, R-square intro to Scikit-learn, training methodology, hands-on linear regression, ridge regression, logistics regression, precision-recall

Machine Learning Module 2

• Decision tree, decision tree regressor, cross-validation Preview

• Bias vs variance, ensemble approach, Bagging, boosting

• Randon forest, stacking, variable importance

• XGBoost, hands-on XGBoost, gradient boost, ada boost

Machine Learning Module 3

• K Nearest Neighbour, k-NN regressor, lazy learners, the curse of dimensionality, k-NN issues

Machine Learning Module 4

• K-means, hierarchical clustering, DBSCAN

• Performance measurement, principal component analysis, dimensionality reduction

Machine Learning Module 5

• Naive Bayes SVM

• Anamoly detection

Time series

• Arima, Sarima, Auto Arima

• Time series using RNN LSTM, prediction of NIFTY stock price