

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

- Random 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
- Anomaly detection

Time series

- Arima, Sarima, Auto Arima
- Time series using RNN LSTM, prediction of NIFTY stock price