Machine Learning

Course description

Encourage yourself and become to master in trending Machine Learning skill. This course has been designed by highly experienced, real time working professionals & experts. In this course candidates will learn advanced and basic concepts of Machine Learning. Our experts will be going to demonstrate challenges and solutions which belong to real-world requirements. We are covering linear regression, logistic regression, Naïve Bayes, kNN, Random forest; candidate will learn both theory and implementation of these algorithms in R and python. This course provides a comprehensive overview of each & every step that you need to learn, curriculum has been designed by highly experienced working professionals based on industry requirement

Student Take away

- Study Material
- Learning stuff
- Sample project for practice

Machine learning certification online training curriculum

Introduction to Machine learning

- What is machine learning?
- History of machine learning
- Uses of machine learning

Types of machine learning

- Supervised learning
- Unsupervised learning
- Reinforcement learning
- Transfer learning

Tools for machine learning

- Programming languages
- Data repositories
- Hierarchical databases
- Software used

Basics of Python programming

- Installing Python
- Matrix operations
- Data loading/unloading
- Plotting and visualizing
- Algorithms - Predicting and modeling

Statistical methods

- Graph theory
- Probability
- Bayes theorem
- Regression models

Data modeling - Linear regression

- Model representation
- Cost function
- Gradient descent for linear regression

Data modeling - Logistic regression

- Hypothesis representation
- Decision boundary

Decision trees

- Basics of decision trees
- Uses for decision trees
- Advantages and limitations
- How decision trees work

Decision trees example

- Create a decision tree
- Requirement
- Training the data

Classifiers & Support vector machines

- Classifiers
- Support vector machines
- Linear and non linear classification
- What are SVM?
- Where are SVM used?

Association rules learning

- What is ARL?
- Where are ASL rules used?
- Support, Confidence, lift and conviction

Clustering

- What is clustering?
- Where is clustering used?
- Clustering mode

Clustering K means Model example

- Preparing the data
- Workbench method
- Command-line method
- Coded method

Basics of neural networks

- Introduction to Neural Networks
- Why Study Neural Networks?
- Real life examples of neural network

Types of neural networks

- Perception
- Recurrent neural networks
- Convolution neural network

Additional topics

- Evaluating Model Performance
- Improving Model Performance
- Similarity between R and Python
- Specialized Machine Learning Topics