

Principles of Machine Learning

Modality: On Demand

Duration: 24 Hours

About this course:

To run predictive models, machine learning uses systems that gain from existing information so as to estimate future outcomes, behaviors, and trends.

With the help of this course of data science, you will be provided complete details of the theory of machine learning joined hands-on experience and practical scenarios validating, building, and deploying the models of machine learning. You will figure out how to create and get experiences from these models utilizing R, and Azure Notebooks.

Course Objective:

- Explore classification
- Building Classification Models
- Regression in machine learning
- Creating Regression Models
- Explain the progress of supervised models
- Techniques for Improving Models
- Details on non-linear modeling
- Clustering
- Introduction to Decision Trees
- Recommender systems
- This course hands-on elements leverage an arrangement of Python, R, and Machine Learning of MS Azure.

Audience:

Machine Learning Engineer

AI developer

Prerequisite:

No prerequisite required for this course.

Course Outline:

Module 1: Classification

- Lesson 1: Introduction to Classification

- Lesson 2: Building Classification Models
- Lab

Module 2: Regression

- Lesson 1: Introduction to Regression
- Lesson 2: Creating Regression Models
- Lab

Module 3: Improving Machine Learning Models

- Lesson 1: Principles of Model Improvement
- Lesson 2: Techniques for Improving Models
- Lab

Module 4: Tree and Ensemble Methods

- Lesson 1: Introduction to Decision Trees
- Lesson 2: Ensemble Methods
- Lab

Module 5: Optimization-Based Methods

- Lesson 1: Neural Networks
- Lesson 2: Support Vector Machines (SVMs)
- Lab

Module 6: Clustering and Recommenders

- Lesson 1: Clustering
- Lesson 2: Recommenders
- Lab

Final Exam

- Final Challenge?