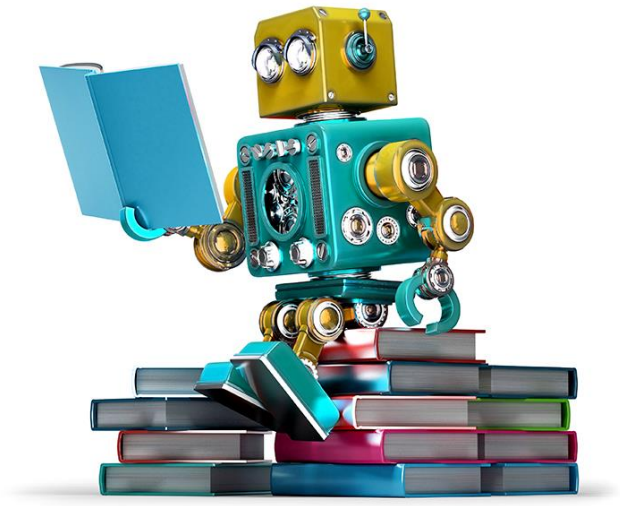
Machine Learning & AI

Robotech Labs Private Limited



Machine Learning & Artificial Intelligence

Machine learning is the subfield of computer science that, according to Arthur Samuel, gives "computers the ability to learn without being explicitly programmed." Samuel, an American pioneer in the field of computer gaming and artificial intelligence, coined the term "**machine learning**" in 1959 while at IBM.

Course Outline

- Introduction to Artificial Intelligence
- Working with Fuzzy logic Algorithm
- Getting started with Fuzzy Logic
- Problem Formulation, Defuzzification&Rulebase
- Working with Fuzzy Logic
- Introduction to Machine Learning
- Applications of Machine Learning
- Artificial Intelligence & Machine Learning
- Database Mining & Machine Learning
- Supervised Learning Introduction & Examples
- Unsupervised Learning Introduction & Examples
- Linear Regression & implementation
- Introduction to Gradient Descent Algorithm
- Linear Algebra review
- Introduction to Neuron
- Introduction to Network Architecture
- Designing Neural Network Model
- Model Representation Methods
- Single Layer Neural Network
- Multilayer Neural Network Architecture
- Training the Network
- Backward Propagation Training
- Using the Network
- Importing & Exporting Network
- Importing & Exporting Training Data

Examples and applications

- Case Study: Cancer Detection
- Case Study: Character Recognition
- Case Study: Iris Clustering
- Case Study: Intelligent Washing Machine Design
- Case Study: 8 Queens Problem Slover

Requirements : A Laptop with pre-installed Anaconda Software

Every Topic will be discussed using a practical Project.

Duration
16 Hours

Certification:

Certificate of Excellence from Robotech Labs Private Limited and our associates.

Requirements:
Seminar Hall, Projector, Sound System and Internet Connection.