



# Machine Learning & AI

## NIT Trichy

### 4-5th October

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
- 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
- Introduction to Network Architecture
- Designing Neural Network Model
- Training the Network
- Backward Propagation Training
- Using the Network
- Importing & Exporting Network
- Importing & Exporting Training Data

## **Examples and applications**

- Case Study: Sales Prediction
- Case Study: Hand Written Character Recognition
- Case Study: Iris Clustering

**Requirements : A Laptop with pre-installed Anaconda Software**

**Duration 2 Days ( 14-16 Hours)**

**Certification Certificate of Excellence from Festember NIT Trichy & Robotech Labs**

**Contact : 9540932700**