



Machine Learning & Artificial Intelligence

DAY-1

- Introduction to Artificial Intelligence
- Working with Fuzzy logic Algorithm
- Getting started with Fuzzy Logic in MATLAB
- Problem Formulation, Defuzzification & Rulebase
- Working with Fuzzy Logic ion Simulink
- 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



IIT Bhubaneswar

The Annual Techno Management Fest

WISSENAIRE

- Importing & Exporting Network
- Importing & Exporting Training Data

DAY-2

- Introduction to Dynamic Neural Network
- Neural Network Blocks in Simulink
- Working with Genetic Algorithm
- Getting started with Genetic Algorithm
- Implementing GA with MATLAB

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 Solver

Requirements : A Laptop with pre-installed MATLAB Software. Preferable Version MATLAB 2010