Artificial Intelligence and Machine Learning

Name of the Workshop: Machine Learning and Artificial Intelligence
Duration: 2 Days
Registration Fees: Rs. 1200/- Per Person
Take Away: Certification to each individual participant and Digital Software toolkit.
Dates: 20th and 21st Jan, 2018
Venue: IISc (Indian Institute of Science), Bangalore

About Workshop:
Artificial Intelligence (AI) is a field that has a long history but is still constantly and actively growing and changing. In this workshop, you'll learn the basics of modern AI as well as some of the representative applications of AI and Machine Learning.
Along the way, we also hope to excite you about the numerous applications and huge possibilities in the field of AI and Machine Learning, which continues to expand human capability beyond our imagination.

Major Topics Covered:

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

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

Prerequisites:
There are no prerequisites to participate in many out of these workshops. These workshops don't require a prior working