

FUZZYTRON Presents

WORKSHOP on ARTIFICIAL INTELLIGENCE

Artificial Intelligence is one the very crucial branch of computer Science which aims at the generation of intelligence among the electronic machines. So it can be inferred in the simple way as a way of making a computer controlled-robot, or a software which will be having the ability of thinking intelligently exactly in the similar way as human does. AI is a way of making a computer, a computer-controlled robot, or a software thinks intelligently, in the similar manner the intelligent humans think .Initially , the thorough study of the human brain is done that how it thinks ,decides,learn new things and acts upon the various different stimuliand then the outcomes are used as a basis of developing intelligence like human in the machines Implementation of Human Intelligence in Machines – Creating systems that understand, think, learn, and behave like humans.

This workshop will be comprised of 4 sessions where each session will be held tentatively of three to four hours. The very details of the sessions are given below:

Session 1

Introduction to Artificial Intelligence and Machine Learning

History and Timeline

Present Scenario and Application

Highlight: Use of AI in few modern application like

- Image recognition
- Autonomous vehicle and Drones (by Tesla and Google)
- Online Assistant (Siri, Cortana, Google Now)
- Automatic Simulations in movies and games
- Stock Predictor
- Prisma and Search Engine Optimisation
- Working of Google translator, Spam filtering, Google Maps
- Facebook abuse control Detection and Automatic Subtitles in YouTube

Session 2

Approach and Algorithm overview in Machine Learning

Introduction to Classifier and Statistical Method, Decision tree, Random forest, Algorithm Evaluation

Discussion about Supervised learning, Unsupervised learning, Reinforcement Learning.

Algorithms in use:

Basic: Graph theory: BFS, DFS; Backtracking and Dynamic Algorithm

Advanced: k-Nearest Neighbour, Naive Bayes classifier, Rocchio Algorithm, Genetic Algorithm

Session 3

Introduction to coding in AI

Introduction to Python and Tensorflow/ Scikit-learn

Training a Classifier for an Image Recognition App and Hand Writing Detection App or another similar app

Implementation of above algorithms
Discussion about the implementation of code in advance applications
Introduction to Deep Learning Algorithm

Session 4

Research goals
Brief discussion on Automated Learning, Natural Language Processing, Motion and Manipulation, modern sensors.
Introduction to Neural networks, Perceptron, Back Propagation.
Turing test and Evaluation based on Turing test
Future application and vision in AI (Application in robotics, networking, Big Data and Data Mining, Automations)
Conclusion Lecture

PERKS: Summer Internships*, Certificate, Software Kits

REGISTRATION FEES

Registration charges Rs.700 /-per participant