

AI/ML Online Training Program

The session will be delivered by the working professional in their respective domain & it will be purely **hands-on practical sessions**.

Modules

1 - Introduction to AI

- Human Intelligence
- Artificial Intelligence
- Why Do We Need AI?
- Applications of AI
- What are Key Components of AI?
- Future of AI

2 - Learning

- Human Learning Process
- Computer or Machine Learning
- Learning Human Abilities
- Speech Recognition
- Computer Vision

3 - Data

- Introduction to Data
- Datasets
- Types of Data
- Database
- Datascience and Big Data
- Computational Data

4 - Data Visualisation

- Algebra and Probability
- Role of Statistics
- Data Visualisation

5 - Problem Solving and Decision Making

- Introduction to Problem Solving and Algorithms

- Pseudocode - Writing Basic Algorithms
- Searching and Sorting Algorithms

6 - AI Languages

- AI and Computer Programming
- Scratch
- Top AI Languages in 2020

7 - Ethics and AI

- Ethics and AI

8 - Reconnecting with Artificial Intelligence

- Base Module Recap
- AI Applications
- Process of Building an AI
- Skills to Build AI Solutions
- Project: Graphical Programming and Air Draw

9 - Ethics in AI

- What does 'Ethical AI' mean?
- Fairness
- Robustness
- Privacy
- Explainability
- Governance

10 - Machine Learning

- Introduction to Machine Learning
- Gathering Data
- Preparing the Data
- Choosing the Model
- Neural Networks and Deep Learning
- Introduction to Maths for ML
- Training
- Evaluating
- Parameter Tuning
- Prediction

- Machine Learning as a Service

11 - Natural Language Processing (NLP)

- Introduction to Natural Language Processing (NLP)
- Natural Language Understanding
- Application of NLP
- Use Cases
- How Does NLP work
- Elements of NLP

12 - Computer Vision (CV)

- Introduction to computer vision
- Computer Vision Applications
- Challenges of Computer Vision
- Optical Character Recognition
- OpenCV
- Project: Face Recognition using Scratch
- Project: Attendance System using Face Recognition

13 - Databases and SQL

- Databases
- SQL

14 - Python

- Introduction to Python

15 - Algorithms

- Introduction to Machine Learning Algorithms
- Algorithms used in Supervised Learning
- Algorithms used in Unsupervised Learning
- Algorithms used in Reinforced Learning