

Artificial Intelligence Up-profiling Training

Course Synopsis

This course provides the participants with a high-level overview of concepts in artificial intelligence and its practical applications. The participants will develop a broad understanding of different approaches to artificial intelligence, including machine learning.

Learning Outcomes

Upon successful completion of this course, the participants will be able to:

- Understand the history of AI development
- Describe different approaches to AI
- Describe use cases of Artificial Intelligence
- Understand basic concepts in machine learning

Course Duration: 2 days

Course Lesson Plan:

Time	Topics
Day 1 09:00 am – 12:30 pm	<ol style="list-style-type: none"> 1. AI – an overview 2. Introduction to Machine Learning <ul style="list-style-type: none"> - ML essential concepts - ML workflow 3. Workshop: Build ML predictive models (Malware/Phishing Prediction)
12:30 pm – 1:30 pm	Lunch
1:30 pm – 5:00 pm	<ol style="list-style-type: none"> 1. Introduction to Deep Learning 2. Anomaly Detection <ul style="list-style-type: none"> - Types of Anomalies - Applications of Anomaly detection - Applications of deep learning in anomaly detection 3. Workshop: Build anomaly detector (network intrusion/video anomaly)
Day 2 09:00 am – 12:30 pm	<ol style="list-style-type: none"> 1. Computer Vision (CV) <ul style="list-style-type: none"> - Computer vision concepts - Compute vision tasks and applications - Application of deep learning in Computer vision 2. Workshop: Build image classification and object detection models
12:30 pm – 1:30 pm	Lunch
1:30 pm – 5:00 pm	<ol style="list-style-type: none"> 1. Natural Language Processing (NLP) <ul style="list-style-type: none"> - NLP basic concepts - NLP tasks and applications - Application of deep learning in NLP 2. Workshop: Build sentiment classifier and speech to text system