CIAI: Cisco Introduction to Artificial Intelligence

Course Modules

Data and AI/ML/DL Fundamentals

- Introduction to Big Data

- Introduction to Data Science

- Introduction to Data Engineering

- Introduction to Artificial Intelligence (AI)

- Introduction to Machine Learning (ML)

- Introduction to Deep Learning (DL)

- AI/ML/DL Use Cases

Artificial Intelligence (AI)

- AI Concept, Methods, and Techniques

- Key AI Challenges (Customer and Provider)

- AI Business Drives

- Evolution of AI Algorithms

Machine Learning (ML)

- Machine Learning (ML) Algorithms

- Supervised Learning

- Unsupervised Learning

Deep Learning (DL)

- Deep Learning Project Phases

- Custom AI Deep Learning Workflow

- Deep Learning (DL) Algorithms

Neural Networks

- Neural Networks Fundamentals

- Neural Architecture Search (NAS)

- Cisco Neural Architecture Construction (NAC)

NLP / NLU

- Natural Language Processing Basics

- NLP / NLU Techniques

- NLP / NLU Deployments

Kubernetes

- What is Kubernetes

- Introduction to Containers

- Container Orchestration Engines

- Kubernetes Basics

- KubeFlow for AI

AI Server Requirements

- GPU

- Modern GPU Server Architecture

- Storage Requirements

Data Science and Infrastructure AI Tools

- Big Data with AI/ML/DL

- Kubeflow

- SkyMind SKIL

- Cloudera Data Science Workbench

- DL Frameworks > Handwritten Math

- Kubernetes

- Demo: Classifying Handwritten Digits with TensorFlow