

# Introduction to AI for IT and Non-IT Professionals

A free Moodle course made available by the Commonwealth of Learning

#### What is this course about?

This course introduces basic concepts of Artificial Intelligence (AI) and provides an overview of fundamental AI techniques. It also includes material for learners who may want to delve further in the field. The idea is to remove the fear-factor of AI from the general audience.

# Why should you do this course?

The course will familiarise you with the hot topics and technologies of today. You will learn about trends, technologies and tools for AI and AI in business, society, and industry. You will get an overview of problem solving and search strategies, knowledge-based systems, expert system, fuzzy logic, natural language processing, robotics, machine learning, neural networks. Advanced topics include Deep Learning, Big Data, Internet of Things and Blockchain.

# What will you learn?

After completing this course, you will be able to understand the following:

- Intelligence and Artificial Intelligence (AI) in a formal and casual perspective
- Types of AI Professionals and AI in Business, Society, and Industry
- Role of Logic in AI and knowledge-based reasoning
- Analyse Solving problem as search and Game Playing as search
- Analyse knowledge-based systems
- Understand some AI research areas such as Expert Systems/Fuzzy logic, Neural Networks, Natural Language Processing, Robotics
- Understand Machine Learning Processes and how Machine Learning algorithms work
- Classify Machine Learning types and tools

#### How to study

## April 25 – June 6, 2022

Length of course: 6 weeks Workload: 4-5 hours per week Pacing: Asynchronous Cost: FREE Level: Introductory Prerequisites: None Language: English Institution: Commonwealth of Learning and Virtual University of Pakistan

#### **Course outline:**

Unit 1: Intelligence, Foundation and Tools of Al Unit 2: Knowledge, Logic and Reasoning

Unit 3: Problem Solving and Knowledge

Representation

Unit 4: Knowledge and Rule-Based Systems

Unit 5: Fuzzy Logic and Machine Learning

Unit 6: Neural networks, IOT, Deep Learning

and Blockchain

#### Assessment

To earn a certificate of completion, participants need to complete all 12 quizzes with a minimum composite score of 85%.

#### How do you get started?

Please go to:

<u>https://bit.ly/3vUzUoz</u> to register for the course. Registration deadline is April 18, 2022.

## For more information

Email: vussc@col.org or visit https://vussc.col.org

This free Moodle course is based on topic videos only and is meant to be studied at your own pace. The suggested time requirement is about 4-5 hours per week for a total of six weeks. However, you may choose to study faster or at a more leisurely pace. You are encouraged to make your own notes and use the Internet to dive deeper into topics that interest you.

The course was developed by Dr. Zafar Alvi at the Virtual University of Pakistan with support from the Commonwealth of Learning.