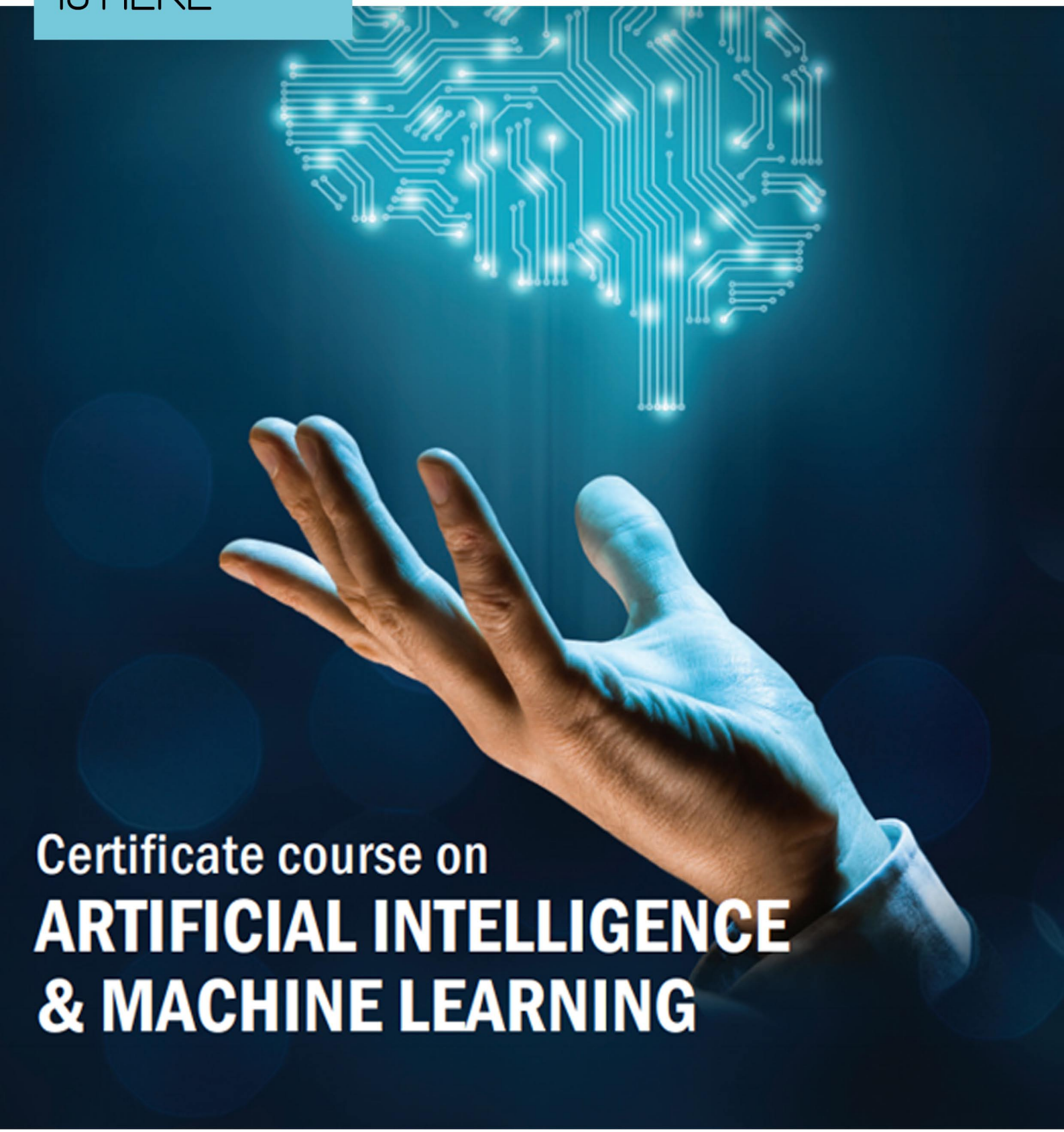
THE FUTURE IS HERE



Certificate course on
ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

JobsAcademy a 2COMS initiative
shaping careers

Course Duration : 3 months
E-Learning Duration : 468 mints
Fees : 30,000 INR
Virtual Classes : 12 Classes

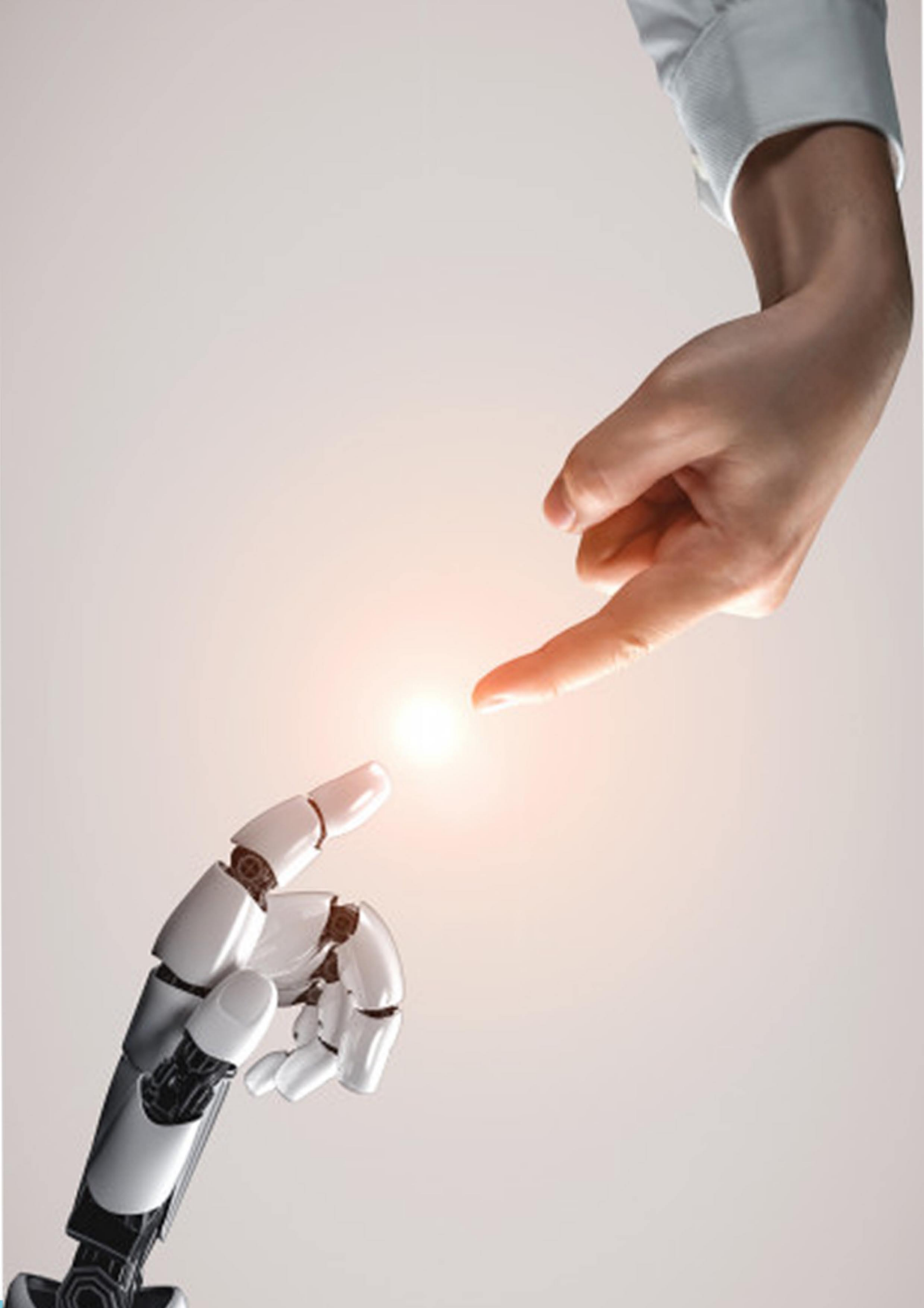
COURSE DESCRIPTION

Machine learning and neural networks are fast becoming pillars on which you can build intelligent applications. The course will begin by introducing you to Python and discussing using AI search algorithms. You will learn math-heavy topics, such as regression and classification, illustrated by Python examples.

You will then progress on to advanced AI techniques and concepts, and work on real-life data sets to form decision trees and clusters. You will be introduced to neural networks, which is a powerful tool benefiting from Moore's law applied on 21st-century computing power. By the end of this course, you will feel confident and look forward to building your own AI applications with your newly-acquired skills!

The code bundle can be downloaded from here

https://github.com/TrainingByPackt/Artificial-Intelligence and Machine-Learning-Fundamentals-eLearning



ELIGIBILITY CRITERIA

- BE / B.Tech / BCA / MCA / B.Sc. (Maths) / M.Sc (Maths) with a minimum of 50% aggregate marks is compulsory
- Candidates with Mathematics, Statistics background will be given preference.
- Minimum of two years full-time work experience after graduation or post-graduation is required.
- For meritorious fresher students / Young Professionals (CGPA > 7/10), the work experience will be relaxed on the basis of application.

LEARNING OBJECTIVES

1. Understand the importance, principles, and fields of AI
2. Learn to implement basic artificial intelligence concepts with Python
3. Apply regression and classification concepts to real-world problems
4. Perform predictive analysis using decision trees and random forests
5. Perform clustering using the k-means and mean shift algorithms
6. Understand the fundamentals of deep learning via practical examples


PRODUCTION
Dashboard
Monitoring
Problems
Group and tag
Tactical views
System
Configuration
External
01
02
03
Home / Dashboard
Automatic mode
DAILY TARGET
WEEKLY TARGET
MONTHLY TARGET

KEY PROGRAM HIGHLIGHTS

Instructor led Training

Co-Branded Certification by Jobs Academy & NSDC

100% Job Assistance in E Learning Courses

Guaranteed Guest Lecture sessions by Industry Experts

One to One Individual Care through Video Conferencing

9 to 7 Student helpdesk support system

Login facility through Web & Mobile

100% recorded repeat class access

Complementary – Spoken English & Personality Development Modules

6 Months access to the course ONLINE

Virtual Lab access throughout the duration of the Course

Affordable Course Fees & Zero Travelling cost

Demo link :
https://packt.leapest.com/#/evaluation/course/djm3tZj78XZO0DchTy4emg5Nq51Ou8X0Ajm68ekwPETtH8rv3B

COURSE CONTENTS

LESSON 1: PRINCIPLES OF ARTIFICIAL INTELLIGENCE

Course Overview
Installation and Setup Lesson Overview
Introduction to AI and Machine Learning
How Does AI Solve Real World Problems?
Fields and Applications of Artificial Intelligence
AI Tools and Learning Models
The Role of Python in Artificial Intelligence
A Brief Introduction to the NumPy Library Python for Game AI
Breadth First Search and Depth First Search
Lesson Summary
Assessment

LESSON 2: AI WITH SEARCH TECHNIQUES AND GAMES

Lesson Overview
Heuristics
Tic-Tac-Toe
Pathfinding with the A* Algorithm
Introducing the A* Algorithm
Game AI with the Minmax Algorithm
Game AI with Alpha-Beta Pruning
Lesson Summary
Assessment

LESSON 3: ROBOT CONTROL SYSTEM USING DEEP REINFORCEMENT LEARNING

Lesson Overview
Linear Regression with One Variable
Fitting a Model on Data with scikit-learn
Linear Regression with Multiple Variables
Preparing Data for Protection
Polynomial and Support Vector Regression
Lesson Summary
Assessment

LESSON 4: CLASSIFICATION

Lesson Overview
The Fundamentals of Classification Part 1
The Fundamentals of Classification Part 2
The k-nearest neighbor Classifier
Classification with Support Vector Machines
Lesson Summary
Assessment

LESSON 5: USING TREES FOR PREDICTIVE ANALYSIS

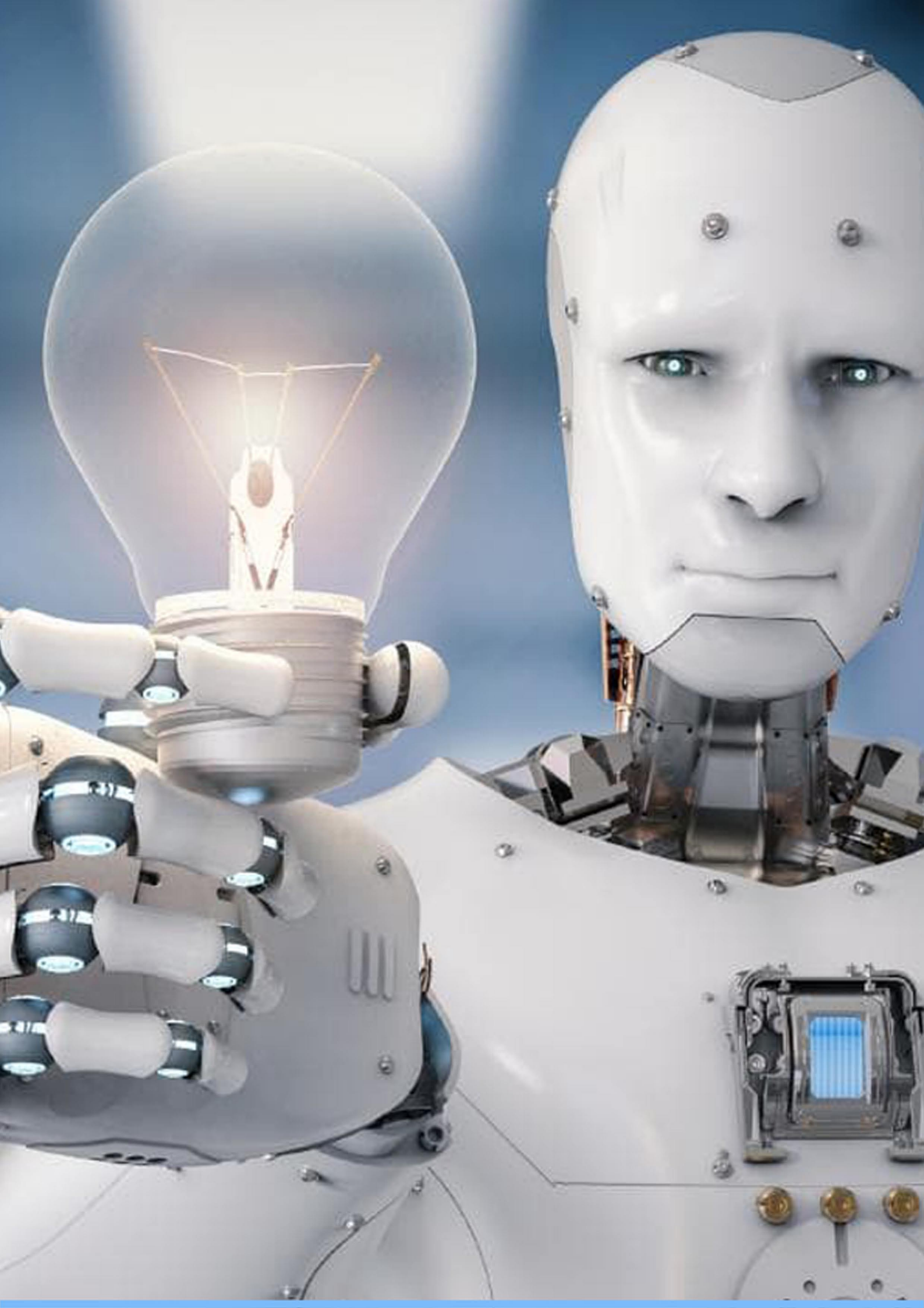
Lesson Overview
Introduction to Decision Trees
Entropy
Gini Impurity
Precision and Recall
Random Forest Classifier
Random Forest Classification Using scikit-learn
Lesson Summary
Assessment

LESSON 7: DEEP LEARNING WITH NEURAL NETWORKS

Lesson Overview
TensorFlow for Python
Introduction to Neural Networks
Forward and Backward Propagation
Training the TensorFlow Model
Deep Learning
Lesson Summary
Assessment

LESSON 4: CLASSIFICATION

Lesson Overview
The Fundamentals of Classification Part 1
The Fundamentals of Classification Part 2
The k-nearest neighbor Classifier
Classification with Support Vector Machines
Lesson Summary
Assessment



JOB ROLES MAPPED

Artificial Intelligence Researcher - Freshers

Artificial Intelligence Researcher - Freshers

Machine Learning/Artificial Intelligence Engineer Fresher

ABOUT JOBSACADEMY

JobsAcademy is the career courses wing of 2COMS Group. JobsAcademy specializes in career aligned courses with market orientation. Graduates to working professionals, people from every walk of life can find a course of their liking and take their career forward. At JobsAcademy, we make it easier for candidates learn at their own pace with interactive learning modules, online classes, webinars and also offline classrooms. Candidates are given the flexibility to learn and also provided placement assistance and certification upon completion of course