



Artificial Intelligence for Kids

Description:

This course introduces the fundamentals of machine learning through the use of well-known Python programming languages. In this course, you will learn about machine learning and why machine learning came into reality. You will learn about various supervised and unsupervised learning algorithms to solve some real-world problems. Students who complete this course will gain hands-on practical experience in building various machine learning algorithms

Start Date:

Doubt Clear Time:

Course Time:

Features:

Online Instructor-led learning

Practical Implementation

- # Integrate academic knowledge with tech
- # Real-time project
- # Live class recording
- # Doubt clearing
- # Assignment in all the module
- # Quiz in every module
- # Career Counselling
- # Completion certificate

What we learn:

- # Introduction to Machine learning
- # Preprocessing data in Python
- # Bias and Variance
- # Data visualization
- # Linear regression
- # Logistic regression
- # K-means clustering
- # K-Nearest Neighbor
- # Projects

Requirements:

- # System with Internet Connection
- # Interest to learn
- # Dedication

Instructor:

>Course Introduction:

>>Course overview

>>Who is this course for?

>>What you will learn from this course?

>>Who is this course for?

>>What are algorithms?

>>What is Artificial Intelligence?

>>Applications of machine learning

>Introduction to learning:

>>What is learning?

>>History of AI (Artificial Intelligence)

>>Different types of learning

>>What is Machine Learning?

>>What is Supervised learning?

>>What is Unsupervised learning?

>>Uses of AI and machine learning

>Assignment1:

>>Describe the significance of machine learning.

>Preparing your system:

>>What is Google Colab?

>>Google Colab overview

>>Understanding Colab interface

>Python Revision:

>>Write a program to check whether the number is prime or not

>>Write a program to take input from user and check whether the number is greater than

>>Write a program to demonstrate OR operator with all possible Boolean values combinations

>>Write a function sumThree() which will take 3 parameters as input and return the sum

>>Assignment: Write a function sumTwo() which will take 2 parameters as input and return the sum

>Discussion:

>>Discussion: How to eliminate Repetitive tasks using Python?

>Preprocessing data in Python:

>>Introduction to data preprocessing

>>Why do we need to process data

>>Python libraries for data processing

>>Gathering data

>>Numerical data

>>Categorical data

>>Cleaning data

>>Dealing with missing values

>>Understand correlation in data

>>Transforming features

>>Creating new features

>>Plotting data

>Assignment2:

>>Plot your class subjects and marks using bar graph

>Introduction to machine learning:

>>How do humans learn

>>Teaching computers to learn like humans

>>Relation between human intelligence and artificial intelligence

>>Discussion: Comparing human learning with machine learning

>>Bias in data

>>Variance in data

>>Training, validating and testing

>Assignment3:

>>Explain high bias and high variance with supported examples

>Machine Learning

fundamentals:

>>Introduction to machine learning models

>>Introduction to Linear Regression

>>What is regression?

>>Linear regression intuition

>>What is classification?

>>Logistic regression introduction

>>Logistic regression intuition

>>Cost function of logistic regression

>>Introduction to unsupervised learning

>>K-means algorithm introduction

>>What is Random initialization?

>>Why random initialization is important?

>>Explain number of clusters.

>>K Nearest neighbor introduction

>>Working of KNN

>>Pros and Cons of KNN

>Practical:

>>Practical: Forecast your father's income using linear regression

>>Practical: Classify whether a student will get a job or not using logistic regression

>>Practical: Predict grades of students using KNN

>Summary:

>>Course Outro

>>Future Scope of Machine Learning