Welcome to ineuron.ai

MATHEMATICS USING PYTHON

Mathematics using Python

Description:

Many people are unaware that Python is a fantastic tool for studying mathematics. Python may be used as a basic calculator, but did you know that it can also be used to master more difficult concepts in algebra, geometry, and matrix analysis? That's precisely what this course will teach you. This course introduces Python programming to students with the help of various mathematical concepts taught in schools. This course is designed in order to help students in understanding the different mathematical subjects and concepts with the help of practical programming and hands-on practice in the Python programming language.

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:

Linear algebra

Vector operations

Matrix

Eigen Vectors and Eigen Values

Matrix Operations in Machine Learning

Requirements:

Interest to learn

Dedication

System with good internet connection

Instructor:

>Introducton:

>>Course introduction

>>Who is this course for?

>>Course overview

>>Course outcome

>Linear Algebra:

>>Introduction to Linear Algebra

>>Vectors

>>Matrices

>>Tensors

>Vector Operations:

>>Transposition and Norm of a Vector

>>Dot Product

>>Orthogonal Vectors

>>Projection of Vectors

>>Line, Plane and Hyperplane

>Matrix:

>>Transposition of Matrix

>>Arithmatic Operation

>>Hadamard Operations and Reduction of Matrix

>>Hands-on Code demo eith Python

>>Solving system of Linear Equations

>>Types of Solutions

>>Ploting Equation

>>Hands-on Plotting equations

>>Matrix Norms and Properties

>>Linear Transformation

>>Matrix Multiplication

>>Matrix Inversion

>>Identity Matrix

>>Diagonal Matrix

>>Symmetric Matrix

>>Determinant of a Matrix

>Eigen Vectors and Eigen Values:

>>Eigen Vectors and Eigen Values

>>Properties of Eigen Values

>>Properties of Eigen Values

>Matrix Operations in Machine Learning:

>>Affine Transforamtions

>>Singular Vector Decomposition

>>Image Compression

>>Moore-Penrose Pseudoinverse

>>Application of Pseudoinverse

>>Principle Component Analysis