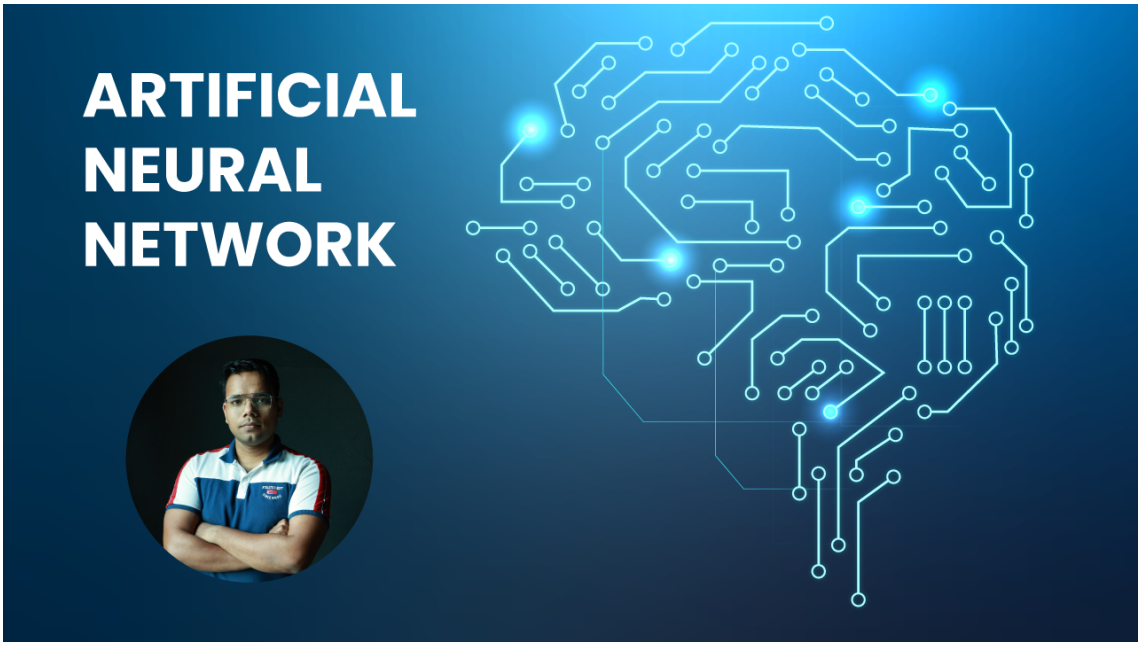
Welcome to ineuron.ai



Artificial Neural Network

Description:

Artificial neural networks (ANNs) are computer systems that are modelled after the biological neural networks that make up animal brains. It processes data and creates patterns for use in decision-making in the same way that the human brain does. Using the most up-to-date frameworks, you'll learn Artificial neural networks, Transfer Learning, and more.

Start Date:

Doubt Clear Time:

Course Time:

Features:

Source code

Roadmap

Quizzes

Assignments

Downloadable resources

Completion certificate

What we learn:

Neural Network

Perceptron

Evaluation of Neural Network

Maths behind concepts of Neural Networks

Back Propagation

Problems faced while training Neural Network and its solution

Building solutions

Requirements:

Basic Programming Knowledge

A System with a decent internet connection

Your dedication

Instructor:

Name:

Sunny Bhaveen Chandra

Description:

Sr. Data Scientist and lecturer at iNeuron.ai with working experience in computer vision, natural language processing and embedded systems. Hands-on experience leveraging machine learning, deep learning, transfer learning models to solve challenging business problems. Also, he has a vast

interest in Robotics.

>Introduction:

>AI | Deep Learning | Evolution of ANNs:

>>Introduction

>>Introduction

>Perceptron:

>Perceptron Implementation:

>Perceptron Implementation | Python scripting and packaging | Modular coding:

>Python logging basics in previous codes, docstrings:

>Python packaging | Github Actions | PyPI:

>Neural Network:

>ANN Derivation:

>ANN implementation using tf.keras:

>ANN implementation using python scripting:

>ANN implementation using python scripting continued:

>Callbacks in Tensorflow:

>ANN with Callbacks | Tensorboard | Early Stopping | Model Checkpointing:

>Mathematics in DL:

>THEORY: Vectors:

>THEORY DIfferentiation | Partial Diff | Gradients | Ascent and Descent:

>THEORY Problems in training NN | Vanishing and Exploding gradients:

>Tensorflow Framework:

>TF 2.x low-level API:

>TF 2.x low-level API PART 2:

>Activation Function:

>Activation Function - Started:

>Activation Function -continued:

>Activation function final:

>Weight initialization, Transfer learning, Batch Normalization:

>Weight initialization and

Transfer learning:

>Batch Normalization: Theory and Practical:

>MLFlow:

>Optimizers, Regularization and Loss function:

>Fast Optimizers | Momentum Optimization:

>NAG:

>AdaGrad:

>RMS Prop | Adam:

>Regularization | Dropout | Loss function: