Welcome to ineuron.ai

OpenCV

Description:

OpenCV (Open Source Computer Vision Library) is an open-source computer vision and machine learning software library. This course will guide you through your first steps in studying computer vision and artificial intelligence (AI) using OpenCV. You'll learn about Image & Video Manipulation, Image Enhancement, Filtering, Edge Detection, Object Detection, and Tracking, among other topics.

Start Date:

Doubt Clear Time:

Course Time:

Features:

Source Code

Downloadable resources

Assignments

Quizzes

Completion certificate

Detailed discussion on every topic

What we learn:

Basics to advance level of OpenCV

Image annotation

Mouse click events

Image processing

Feature matching

Corner detection and many more

Requirements:

No prior knowledge in OpenCV

Basic knowledge in Python programming

A system with a decent internet connection

Dedication

Instructor:

Name:

Ashish Kushwaha

Description:

Worked in various Machine Learning, Deep Learning, Data Science and Image Processing projects. he has expertise in Python Programming. Currently he is working as a freelancer & tutor & teaching many students from different regions across the globe.

>OpenCV basics:

>>Installation of OpenCV

>>Read and display images

>>Pycharm IDE installation

>>Read the live video feed from webcam and display

>>Saving an image file

>>Saving a video file

>>Image resizing and rescaling

>Image annotation:

>>Drawing a line on the image

>>Drawing a circle on the image

>>Draw geometric shapes on images

>>Write text on image

>>Display the FPS on image

>Mouse click events:

>>What is mouse click events?

>>How to use mouse click events?

>>Getting the coordinates of the mouse click events

>>Use mouse as a paint brush

>>Using mouse to change the colors

>Image processing:

>>Changing color spaces (BGR2RGB, Grey scale, HSV and etc.)

>>Geometric transformation of the images

>>Scaling

>>Translation

>>Warning

>>Rotation

>>Affine transformation

>>Perspective transformation

>>Image threshold

>>Smoothing images

>>Image gradients

>>Canny edge detection

>>Contours in OpenCv

>>Histograms

>>Template matching

>>Hough line transform

>>Hough circle transform

>>Cascades

>>Image segmentation with Watershed algorithm

>Advanced OpenCv:

>>Corner detection

>>SIFT, SURF, FAST, BRIEF, ORB

>>Feature matching

>>Feature Matching + homograph

>>Image denoising

>>Image inpainting