



Image Processing

Description:

In this hands-on course, You will learn how to filter, change, and edit images. You will also learn how to use OpenCV to perform various image processing tasks with hands-on practical experience. Students who complete this course will be able to apply what they have learned in this course to a variety of fields, including machine learning and artificial intelligence, machine and robotic vision, space and medical image analysis, and many more.

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:

Image processing

OpenCV

Scikit

Color space

Creating Basic Drawings

Advanced OpenCV

Projects

Requirements:

System with Internet Connection

Interest to learn

Dedication

Instructor:

Name:

Monal Kumar

Description:

Monal Kumar is a data scientist and instructor working at iNeuron having 2+ years of total experience in both service and product-based organisations. He is specialised in Deep Learning, Computer vision and Image processing. Previously, he held positions as a support configurator at Wipro Technologies and as a Deep Learning researcher at Harptec Research. Offering the finest possible services to his clients. In addition to his primary job function, he is recognised for his creativity and ideas that change the nature of the existing problem.

>Course Introduction:

>>Welcome to image processing course

>>What you will learn from this course

>>Course pre-requisites

>>What is image processing?

>>Who is this course for?

>>What you will get from this course?

>>How to get access to course materials?

>>What career path you can follow after completion of this course?

>Introduction to Image

Processing:

>>What do you mean by image processing?

>>Why image processing is used?

>>What are images?

>>Fundamentals of images

>>What do you mean by pixel?

>>Image resolution

>>PPI and DPI

>>What is a bitmap image?

>Compression:

>>What is compression?

>>How compression is helpful?

>>Lossless compression

>>Lossy compression

>>Different format of images

>Color Spaces:

>>What is a color spcaes

>>RBG color space explanation

>>XYZ color space

>>HSV/HSL

>>LAB color space

>Scikit image:

>>Scikit image introduction

>>Uploading and Viewing an Image

>>Getting Image Resolution

>>Looking at Pixel Values

>>Converting Color Space

>>Saving an Image

>Creating Basic Drawings:

>>Lines

>>Rectangles

>>Circles

>>Bezier Curve

>>Doing Gamma Correction

>>Rotating, Shifting, and Scaling Images

>Advanced OpenCV:

>>Introduction to OpenCV

>>Blending two images

>>Changing brightness

>>Changing contrast

>>Adding Text to Images

>>Smoothing Images

>>Median Filter

>>Gaussian Filter

>>Bilateral Filter

>>Resizing images

>>Image Thresholding

>>Histogram Equalization

>Projects:

>>Project 1: Creating a HDR with OpenCV

>>Project 2: Removing Green screen from an image with different background

>Summary:

>>Course Outro

>>Future Scope of Image processing