

# Computer vision Curriculum

## Course Overview:

Learn A-Z everything about Computer vision From the basic to advanced.

## What You Will Learn:

- ❖ Basic fundamentals of Computer vision.
- ❖ Image and video processing with OpenCV and Mediapipe libraries.
- ❖ Data augmentation and data annotation.
- ❖ CNN architecture, hyper parameter tuning and transfer learning.
- ❖ Generative adversarial networks.
- ❖ Image classification, Object detection, Image segmentation, Face recognition, Pose estimation, Face generation, Image filtering, Art and Painting generation etc.
- ❖ Project management, development and deployment.
- ❖ Web scraping techniques.
- ❖ Hands on experience in real world projects.
- ❖ Computer vision interview questions.
- ❖ Computer vision mock interview preparation.
- ❖ Helping resume creation.

## Requirements:

- ❖ Carry your own laptop with decent configurations
- ❖ Knowledge about Python programming language
- ❖ Machine learning and Deep learning concepts
- ❖ Familiar with TensorFlow and Pytorch frameworks

## Syllabus:

Section	Topic
1	<b>Introduction of course</b>
2	<b>Introduction of Computer Vision</b>
3	<b>Image Processing with OpenCV</b>
4	<b>Video Processing with OpenCV</b>
5	<b>Working with Mediapipe</b>
6	<b>Data Augmentation</b>
7	<b>Data Annotation</b>
8	<b>Introduction of Convolutional Neural Network (CNN)</b>
9	<b>Transfer Learning</b>

<b>10</b>	<b>Object Detection</b>
<b>11</b>	<b>Image Segmentation</b>
<b>12</b>	<b>Generative Adversarial Network (GANs)</b>
<b>13</b>	<b>Additional knowledge</b>