



# Course Curriculum Overview

## • Goals of this course

- Understand Computer Vision
- Understand how to use opencv and Python work with Images and Videos
- Be able to apply these skills to your own projects

## • Numpy and Image Basics

- Quick section on numpy basics and how to manipulate images with it.

## • Image Basics with opencv

- Begin to work with the opencv library with images
- Basic commands and drawings on images.

## • Image Processing with opencv

- Understand more advanced opencv operations that are useful in real-life.

Date : \_\_\_\_\_

## o Video Processing with OpenCV

→ Understand the basics of working with video files and streaming webcam videos with OpenCV library.

## o Object Detection

→ Learn the various different methods of detecting objects in images and videos.

→ Start with Basic template matching and work our way up to face detection.

## o Object Tracking

→ Expand from our knowledge of object detection to tracking objects in videos.

## o Deep learning with computer vision

→ Begin to combine knowledge from previous sections with latest tools in Keras and Tensorflow for SOTA deep learning applications.