



## Computer Vision Crash Course

### **Description:**

This specialisation is the first to cover the fundamentals of computer vision in depth. It is aimed at learners, practitioners, and researchers who have little or no experience with computer vision and focuses on the mathematical and physical foundations of vision. Any learner who completes this specialisation has the potential to succeed in the field of computer vision, which is a booming field that is predicted to grow in importance in the next decades.

### **Start Date:**

### **Doubt Clear Time:**

### **Course Time:**

### **Features:**

# Challenges

# Quizzes

# Assignments

# Downloadable resources

# Completion certificate

### **What we learn:**

# Fundamentals of Computer Vision

# CNN architectures, Classification

# Various architecture usages with Computer Vision for advanced level works

### **Requirements:**

# Basic knowledge of Python programming

# A system with stable internet connection

# Your dedication

### **Instructor:**

#### **Name:**

Sudhanshu Kumar

#### **Description:**

Having 8+ years of experience in Big data, Data Science and Analytics with product architecture design and delivery.

Worked in various product and service based Company.

Having an experience of 5+ years in educating people and helping them to make a career transition.

#### **>CNN overview:**

>>Intro to CNN and Padding

>>Batch Normalization & Implementation

## **>Advanced Computer Vision**

### **Part 1:**

>>Intro to Transfer learning - and its architectures - Lenet, Alexnet, vgg16/19 architectures

>>Implementation of VGG16 on dogs and cats images in Tensorflow 2.x

>>RCNN and Fast RCNN and Object detection basic introduction

>>Faster RCNN architecture

>>Yolo architecture

>>SSD

## **>Advanced Computer Vision**

### **Part 2:**

>>Mask RCNN and Tracking theory

>>GAN Part 1

>>GAN Part 2