# SANGEET KUMAR MISHRA

C-340, Vidyasagar Hall Of Residence, IIT Kharagpur & West Bengal. 721302 (+91) 7478017666  $\diamond$  sangeet@iitkgp.ac.in

#### **EDUCATION**

Indian Institute of Technology Kharagpur

Kendriya Vidyalaya No 1, Bhubaneswar

July 2016 - Present

Undergraduate

Overall GPA: 8.47/10

Major in Civil Engineering (expected 2020)

Minor in Computer Science Engineering (expected 2020)

July 2014- May 2016

Intermediate in Science

Percentage: 90.1

Central Board Of Secondary Education

April 2003 - May 2014

Matriculation

DAV Public School, Sector 4, Bokaro Central Board Of Secondary Education

Overall GPA: 10

### TECHNICAL STRENGTHS

**Programming Languages** 

C/C++,Python,JavaScript, MATLAB/Octave

Web Technologies

HTML, CSS

Libraries

ROS, OpenCV

Machine Learning

TensorFlow, TFLearn, Scikit Learn, PyTorch

#### **EXPERIENCE**

# Autonomous Underwater Vehicles, IIT Kharagpur

February 2017 - Present

Guided By: Prof. C.S. Kumar

Software Team member

- · Implemented CA-CIFAR algorithm and HSV Thresholding to detect underwater objects
- · Implementing Mission Planner for Kraken 4.0 on ROS using actionlib and smach
- · Implementing Faster-RCNN for real time object detection of buoy

#### AgNEXT Technologies, IIT Kharagpur

October 2017 - Present

Guided By: Prof. Mrigank Sharad

Machine Learning and Image Processing Team Member

- · Segmentation of region affected by pests on crops
- · Classification of pests to help the farmers take better medicative or preventive steps

#### AgNEXT Technologies, IIT Kharagpur

October 2017 - Present

Guided By: Prof. Mrigank Sharad

Machine Learning and Image Processing Team Member

- · Segmentation of region affected by pests on crops
- Classification of pests to help the farmers take better medicative or preventive steps

#### **PROJECTS**

#### Semantic Segmentation using Adversarial Networks

September 2017 - Present

Guided By :: Prof. Debdoot Sheet and Miss Rachana Sathish

IIT Kharaqpur

- · Implementing adversarial training approach to train semantic segmentation models
- · Tools used :: PyTorch —— Numpy

Dog Or Cat

Self Project

https://github.com/sangeet259/Dog-or-Cat

- · A Convolutional Neural Network based application to detect Cats and Dogs
- · Implemented a 6 Layered architecture which achieved 92% accuracy
- · Tools used :: TFLearn —— Tensorflow —— NumPy

# K Means Compressor

Course Project

Machine Learning — Coursera

https://github.com/sangeet259/KMeans-Compressor

- · Implemeted KMeans Clustering algorithm to find dominant colours in an image
- · Achieved a 6 times reduction in size by using only the dominant colours for Image representation
- · Tools used :: Octave

#### Sign Language Detection

Course Project

Deep Learning Specialization Coursera

https://github.com/sangeet259/Sign-Language-Detector

- $\cdot$  A 3 layer Deep Neural Network based program to detect hand signs from 0 to 5
- · Tools used :: Tensorflow —— NumPy

Synisto Self Project

https://github.com/sangeet259/synisto

- · A Collaborative Filtering based application to suggest movie to users on MovieLens 1M dataset
- · Working on using Restricted Boltzmann Machines for the prediction
- · Tools used :: NumPy —— SciPy

#### ACADEMIC ACHIEVEMENTS

- Ranked in National Top 1% (amongst 1,300,000 candidates) in JEE Mains 2016 and Top 1.8% (amongst 200,000 candidates) in IIT-JEE Advanced 2016
- Ranked in the State-wise Top 1% in Indian National Chemistry Olympiad

### RELEVANT COURSES

Course Name

Programming & Data Structures

Algorithms Specialization

Machine Learning

Deep Learning Specialization

CS231n: CNNs for Visual Recognition(ongoing)

Authority

IIT Kharagpur

Stanford University via Coursera Stanford University via Coursera Deep Lagraina ei via Coursera

DeepLearning.ai via Coursera

Self Learning

# POSITION OF RESPONSIBILITY

## Captain - Open Soft :: VS Hall Of Residence

August 2017 - Present

- · Captaining a team of 10 people to compete in Software Development Challenge : Open Soft
- · Promoted the use of version control systems like Git

#### EXTRA-CIRRUCULAR

- More than 80 hours of dedicated community service via National Service Scheme
- Secured Silver in Biz Quiz General Championship 2017 and represented LBS Hall of Residence
- Participated in Eastern Vocals General Championship
- Secured Silver in General Quiz in Impulse 2017