# SANGEET KUMAR MISHRA

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#### **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
- · Implemented real time underwater buoy detection using SSD and Mobile Nets
- · Working on making the inference of models lightweight and suitable for the bot using Movidius NCS

# Kharagpur Open Source Society,IIT Kharagpur

October 2017 - Present

Guide: Prof. Animesh Mukherjee

Executive Head

- · Contributed to the development of KWoC 2017 Website with more than 2700 registrations
- · Mentored students in Kharagpur Winter of Code 2017 : Generative Adversarial Networks
- · Successfully Conducted the first ever Open Source Summit during Kshitij 2018

## 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

October 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

## 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

- · 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/sangeet 259/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

#### TECHNICAL STRENGTHS

**Programming Languages** C/C++,Python,JavaScript, MATLAB/Octave

Web Technologies HTML, CSS Libraries ROS, OpenCV

Machine Learning TensorFlow, TFLearn, Scikit Learn, PyTorch, Keras

## **EDUCATION**

Indian Institute of Technology Kharagpur

July 2016 - Present

Undergraduate Overall GPA: 8.13/10

Department of Civil Engineering

Kendriya Vidyalaya No 1, Bhubaneswar July 2014- May 2016

Intermediate in Science Percentage: 90.1

Central Board Of Secondary Education

DAV Public School, Sector 4, Bokaro

April 2003 - May 2014

Matriculation Overall GPA: 10

Central Board Of Secondary Education

#### 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

Authority

IIT Kharagpur

Algorithms Specialization Stanford University via Coursera Machine Learning Stanford University via Coursera

Deep Learning Specialization Deep Learning.ai via Coursera

CS231n: CNNs for Visual Recognition(ongoing) Self Learning

#### POSITION OF RESPONSIBILITY

#### Tutor: Robotics Winter Workshop

December 2017

· Taught in IEEE Certified Image Processing Winter Workshop conducted by TRS,IIT Kharagpur

## **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