# **Suchit Jain**

I am a Machine Learning enthusiast, always exploring and applying it for various applications. I have developed a keen interest in the sub-domain of computer vision and am looking forward to working on interesting research projects in the field

www.suchitjain.me suchit27022@gmail.com

+91 9810606539 New Delhi, India

linkedin.com/in/suchit-jain https://github.com/suchitj2702

New Delhi, India

#### **WORK EXPERIENCE**

05/2018 - 07/2018

# **Artificial Intelligence Intern**

Omnipresent Robot Tech

A leading startup in India, providing robotics, industrial UAV/drone, and video analytics solutions.

- Lead the computer vision module of the Self-Driving car project
- Implemented a real-time object detector and classifier for the self-driving car project using the Mask RCNN Neural Net. architecture
- Implemented a real-time lane detector for the self-driving car project using the LaneNet Neural Network architecture
- Used Robot Operating System(ROS) to manipulate vehicle movements in response to the object detector and the lane detector
- Implemented a video transmission system using the RSTP protocol to stream a live video feed onto an IP Address

Contact: Aakash Sinha - Founder/CEO- Omnipresent Robot Tech aakashsinha@omnipresenttech.com

# **Young Engineer(Human Factors Department)**

NASA Space Settlement Design Competitions

09/2014 - 08/2015

Kennedy Space Centre, Florida, USA

An aerospace industry design simulation competition organized by NASA engineers

- Composed industry level reports envisioning space colonies under the direct counsel of experienced NASA and Boeing engineers.
- Designed 3 different space settlements in and around Mars.
- Worked in cross-continental collaborated, hypothetical "companies" to prepare proposals from scratch in 24 hours.

### **RESEARCH PROJECTS**

# **Smart City Planner**(09/2017-Present)

- A computer vision web application to simplify the process of city planning using Mask RCNN based segmentation and Random Forest classifier in the back-end.
- Uses drone collected images and orthomosaics as input to automatically calculate road length, road area, number of trees, tree-cover area, number of plots and plot-cover area.
- Generates comparison metrics for data collected over the same area at different intervals of time.
- Can be used by municipal corporations to track changes in different parameters over a duration of time and by forest authorities to track illegal deforestation.

#### **ACADEMIC PROJECTS**

# Face Detection using eigenfaces (04/2018)

- Implemented a face detector using the eigenfaces approach.
- Implemented all the mathematical transforms using MatLab, without the use of any libraries or mathematical functions.

#### **SKILLS**

Programming - Python, OpenCV, MatLab, SQL, LaTex, Verilog, C++, C, Java

Machine Learning - Neural Networks, Random Forest, Naive Bayes, Support Vector Machines, Regression

Amazon Web Services - Elastic Compute 2(EC2), Elastic Beanstalk, Load Balancer

**Google Cloud Platform - Compute Engine** 

Software - Linux, MatLab IDE, Photoshop, GIMP, Solidworks, Robotics Operating System, Vivado VHDL, Git, Github, Apache DB

#### **EDUCATION**

# **BTech. Electronics and Communication Engineering**Shiv Nadar University

07/2016 - Present

CGPA - 8

# **High School**

# Amity International School, Noida

#### 2002-2016

- India AISSE (High School Senior Secondary Examinations) -93%
- India AISSE (High School Secondary Examinations) CGPA 10

#### **HONOR AWARDS**

**International Space Settlement Design Competition, NASA** Winner(2015)

**Asian Regional Space Settlement Design Competition** Winner(2015)

#### **CERTIFICATES**

# **NVIDIA Deep Learning Institute(2017)**

Attended workshops on various Deep Learning topics held at IIT, Delhi

Machine Learning - Stanford University - Coursera

Grade Achieved - 96%