# Sagnik Gupta

Student, IIIT Hyderabad

25, 1996

🔽 Kolkata, India

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### SKILLS —

Programming Languages

C++, C, Java, Python

Web Technologies

★ HTML, CSS, Javascript

### ACHIEVEMENTS —

Project: Certificate for best final year project-2019 entitled "A Multi-Level Polygonal Approximation Based Shape Encoding Framework for Automated Shape Retrieval"

**Codechef:** Codechef rating of 1693 with 3 stars.

**Gate**, **2019**: Secured 98.54 percentile in Gate CSE, 2019.

**EXECUTE** ICSE, 2013: Secured top 1 percentile score all over India.

## **CERTIFICATIONS** -

\* NPTEL certification: "Introduction to Modern Application Development", IIT Madras.

\* NPTEL certification course: "Programming, Data Structures and Algorithms using Python", IIT Madras.

\* NPTEL certification course: "Design and Analysis of Algorithms", IIT Madras.

# POSITIONS OF RESPONSIBILITY -

† Student Placement Coordinator, IIIT Hyderabad

• Member of the Computer Society of India, Kolkata Chapter

### Work Experience

 $\label{eq:may_solution} \mbox{May, 2020 -} \quad \mbox{Research Intern, Samsung R\&D Institute Bangalore}$ 

July, 2020 **Project:** Video Instance Segmentation

Built a deep-learning model based on MaskTrack RCNN, to detect, segment and track object instances in a video sequence.

Technology Used: PyTorch, Cuda, Docker

June, 2018 - Trainee, Computer Society of India, Kolkata

July, 2018 Project: Employee Database Maintenance

Built a computerized employee maintenance and management system

with a user friendly GUI for navigation purposes.

Technology Used: Python, Pandas, PythonGUI/TkInterface

#### Education

2019 - present M.Tech - Computer Science and Engineering

IIIT Hyderabad CGPA: 9.21

2015 - 2019 B.Tech - Computer Science and Engineering

Institute of Engineering and Management, Kolkata CGPA: 9.06

April, 2015 ISC - Standard XII

Modern English Academy, Barrackpore Percentage: 95.50%

April, 2013 ICSE - Standard X

Modern English Academy, Barrackpore Percentage: 96.00%

### **Projects**

August, 2020 Wikipedia Search Engine

 $Technology\ used:\ Python 3$ 

Designed a complete search engine, on top of 42 GB Wikipedia corpus,

with subsecond latency for searches.

It provides additional support for field queries, with normal queries.

May, 2020 CraftML

Technology used: Python3, Cuda

Implemented extreme multi label learning (XML) using a random

forest based algorithm.

The parallelized implementation uses a K-Means clustering based

partitioning approach to improve performance.

December, Single Image Haze Removal

2019 Technology used: Python3

Implemented haze removal using only the single source image.

It uses the Dark Channel prior as a basis for estimating the thickness

of the haze and removes it using the thickness map.

October, 2019 Peer-to-Peer Group File Sharing System

 $Technology\ used\ :\ C++$ 

Developed a group based file sharing system, where users can download

and upload files at the same time in a peer to peer network.

It provides support of multithreading and additional fault tolerance

features by maintaining two trackers instead of one.

November, Inode based File System

Technology used : C++

Implemented a inode based file system on top of a virtual disk, designing our own methods for the basic file system operations.

The GUI feature eases navigation through the file system and view

the present contents in it.

#### **Course Projects**

March, 2020 Hate Speech Text Classification April, 2020 Tom and Jerry Emotion Detection

Python3 Python3