Sumanyu **Ghoshal**

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Education

Indian Institute of Technology Bombay *Powai, Mumbai 400 076, India*
B.Tech. in Computer Science and Engineering (Grade:9.84/10) *2018 - 2022*

Academic Achievements

2019	**Institute Academic Prize**, Indian Institute of Technology Bombay	*Mumbai, India*
2018	**All India Rank 160**, JEE Advanced (out of 200,000+ candidates)	*IIT Kanpur, India*
2015	**National Finalist**, Computer Society of India Young Talent Search in Computer Programming Contest	*Chennai, India*
2013-18	**TIPster**, Duke University (Awarded to the top 0.5%ile of applicants in India)	*Durham, NC, USA*

Projects

Face Recognition and Autonomous Mapping Robot (https://github.com/tech-chef/Main**)** *IIT Bombay*
Institute Technical Summer Project - 2019 *Summer 2019*
- Designed a robot using raspberry pi 3b+ with a facial recognition module implementing the LBPH algorithm using OpenCV
- Implemented mapping of regions and finding out the point-to-point shortest path using SONAR scanners and Wavefront algorithm

Automation of Splitting of expenses (https://github.com/samadkoita/BOIS-Splitwise**)** *IIT Bombay*
Prof. Amitabha Sanyal *Autumn 2019*
- Developed a django web app to automate the addition and splitting of bills amongst various stakeholders
- Designed an SQL-based database in order to efficiently implement a feature to settle-up expenses similar to the Splitwise app
- Provided dedicated insights on the kinds of expenditure made by each user using javascript

Dead-end Roads *IIT Bombay*
Prof. Ajit Diwan *November 2019*
- Designed an algorithm to determine the roads which always lead to a dead end by simply comparing thee out-degree of each node
- Developed a code in c++ to figure out the longest dead end in the graph with O(n+m) time complexity using the algorithm designed

A portal to Select and Evaluate Teaching Assistants *IIT Bombay*
Undergraduate Academic Council *June 2019 - Ongoing*
- Currently designing a django - based web application to create a portal for professors to select, and then evaluate the teaching assistants
- Involved in the conceptualization of the product. Interacted with various professors and heads of departments to understand their requirements

Internship

Worxogo Solutions Pvt. Ltd *Bengaluru, India*
Software Development Intern *July - September 2019*
- Developed a program to automate the nudges sent to the senior management of clients on python
- Implemented OpenPyXl library to import data and export information to excel sheets
- Created a Graphical User Interface (GUI) for the program using the Tkinter library

Positions of Responsibility

Student Alumni Relations Cell, IIT Bombay *Mumbai, India*
Team Member, Alumni Student Mentorship Program *April 2019 - Present*
- Working on a team of 7 to co-ordinate with a pool of above 300 alumni with industrial or research background
- Co-ordinating with a mentee pool of above 500 students to ensure a strong mentor-mentee relationship
- Implementing events like Breaking the Ice and Shadow Program for improving the student-alumni relations

Technical Skills

Programming and Software Development	C++, C, Python, Java, Bash, Git
Web Development	HTML, CSS, JavaScript, Django, SQL
Analytics and Computer Vision	Matlab, Octave, Numpy, Scipy, Matplotlib, OpenCV(Basics), TensorFlow(Basics)