Aditya Trivedi

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EDUCATION

Indian Institute of Technology, Guwahati	July 2019 – Present
B.Tech in Computer Science and Engineering.	Major GPA : 9.44/10
Minor in Product Design.	Minor GPA : 10.00/10

Relevant Coursework: Computational Geometry, Data Structures and Algorithms, Networks, Operating Systems, Databases, Computer Architecture, Probability Theory, Discrete Mathematics, Optimization

RESEARCH EXPERIENCE

Summer Intern - MIST Lab, Polytechnique Montréal   Apr. 2021 - Aug. 2021

Mentor: Professor Giovanni Beltrame   *Remote*

- Assisted in development of a Software-In-The-Loop simulator for CogniFly drones.
- Created a new target in the iNavigator Flight Controller
- Modified Python libraries by replacing the use of serial protocols by **Sockets**, to make it TCP signal compatible.

PROJECTS

Quadtree Based Epidemic Info. Dissemination Visualiser   git.io/epiViz

Group Project

- Built a **p5.js** based web app to show how information is disseminated among agents in close proximity - modelled as an epidemic
- Users can **interact** and adjust various parameters to simulate scenarios
- **Quadtrees** are used to exploit proximity among agents and make computations faster
- Based on this **paper**

"graph.gg" - Graph Network Visualiser   git.io/graphgg | Live Website

Group Project

- Built a **Django** based web-app to visualise network relationships between Indian celebrities through graphs.
- Implemented visualisation of Shortest-Path, Mutual Friends and Friend Recommendations.
- Scraped Wikipedia data and built **Neo4J** graph DB which was visualised using **React** libraries.

BTP & Research Intern Portal   git.io/Shodh

Students' Web Committee, IIT Guwahati

- Developed A **Django** web-app to manage allotment of B.Tech Projects & Research Interns.
- Added functionality of searching projects & opportunities by name, tag and branch.

Placement Portal   git.io/placeEZ

Computer Science and Engineering Association, IIT Guwahati

- Created an **Android** app for students, placement cell and employers to manage placement activities.
- Implemented various filters such as location, minimum CPI, etc. for applicants to find perfect opportunity.

AWARDS AND HONOURS

ACM-ICPC Regionalist '20, secured **India Rank 251** and 268 in Amritapuri Preliminaries and Regionals respectively.	2021
Awarded **POINT Summer Research Scholarship** by Polytechnique Montreal	2021
Aditya Birla Scholarship 2019 (shortlisted) Among **Top 35** in India to be shortlisted	2019
All India Rank 439 in JEE Advanced among 0.16 million candidates	2019
All India Rank 689 in JEE Mains among 1.14 million candidates	2019
All India Rank 3 in Technothlon Prelims, IIT Guwahati. Also the City and State Topper	2018

Technical Skills

Programming : C, C++, Python, Verilog

Web Development : Django, React, p5.js, JavaScript, HTML, CSS

Miscellanous : LaTeX, Git, Docker, Android Studio, Neo4J, Basic Shell Utilities

Community Service

Saathi Counselling Cell 2021: Mentored 4 sophomores on IIT-G academic and non-academic activities.

CSEA Mentor 2020: Mentored 5 freshmen on academic and non-academic activities.

Extracurriculars

Competitive Programming : Highest rating - **1762 (*Expert*)** on Codeforces (Handle: trivedi)
- JPMC Quant Challenge (Algorithmic Programming): Secured **India Rank 21** among 2500+ contestants.
- Codemates x1 (Team Contest): Secured Team **Rank 5** among 866 teams.
- Codeforces Round #690: Secured **Global Rank 71** among 12000+ contestants.
- Codeforces Round #713: Secured **Global Rank 178** among 17000+ contestants.

Computer Science & Engineering Association :
- Technical & Events Executive : Responsible for organising CSEA Events & Talks.   2021-Present
- Technical Manager : Organised Lectures, Coding contests for IITG community.   2020-21

Quizzing : Part of Quiz Club Core Team. Part of Quiz Contingent at the Inter IIT Cultural Meet 2019

Hostel Activities :
- Technical Secretary, Responsible for technical events of the hostel, mentoring freshers.   2021-Present
- **Kriti 2019**, Inter Hostel Tech. Competition: **Gold** in General Quiz, **Silver** in Case-Study   2019