

Pursuing Honors in **Computer Science Engineering**; Passionate about **ML, RL, DL & Data Science**

SCHOLASTIC ACHIEVEMENTS

- Bagged **Gold Medal** in **Bosch's Route Optimization** challenge at the 8th Inter IIT Tech Meet 2019
- Secured **2nd** position in Capture the flag **Cybersecurity challenge** at the 8th Inter IIT Tech Meet 2019
- Secured **AIR 340** in IIT-JEE Advanced | **AIR 176** in JEE Main Paper-I | **AIR 90** in JEE Main Paper-II 2016
- Amongst **Top 300** students in the country qualified for **INPhO** (for two straight years) and **INMO** 2015,14
- Achieved **AIR 173** in KVPY Fellowship by IISc Bangalore | Recipient of NTSE Scholarship by NCERT 2014,12
- Secured **AIR 12** in 43rd National Mathematics Olympiad by **AMTI** | State Rank **4** in 41st **APAMT** 2013,12

POSITIONS OF RESPONSIBILITY

Department General Secretary | CSE Department, IIT Bombay April 2019 - July 2020

- Elected student representative in department policy formulation committees to ensure student involvement
- Re-instantiated and managed Cyber-Security Club, organized CTF events to increase awareness about cybersecurity

Chief Editor | CSE Department Newsletter March 2020 - Present

- Spearheaded a 3-tier team of 12 members in designing and development of the content for articles pertaining to research groups, the scope of career in core and non-core sectors and semester exchange experience

Department Academic Mentor | CSE Department, IIT Bombay June 2020 - Present

- Mentoring 4 sophomores for their academic and general concerns, and helping them cope with the curriculum
- Mentor to additional 2 students in an academic rehabilitation program (ARP) & guiding them back on track

Teaching Assistant | Programming Lab, Prof. Sai Vinjanampathy August 2020 - Present

Mentor | Quantum Computing, Computer Vision: Maths and Physics Club April - June 2020

Joint Secretary, Sports Secretary | CSEA, IIT Bombay April 2017 - March 2019

Convener | Kritika - The Astronomy Club April 2017 - March 2018

PROFESSIONAL EXPERIENCE

Amazon Development Centre India Pvt. Ltd. | Auto Trouble Ticket Manager May - July 2019

- Designed **runtime compilation** module using **Java Compiler API** to implement dynamic code execution
- Automated process of resolving **trouble tickets** raised on **amazon services** by developing java package
- Developed a **generic framework** to plug-in their models for information retrieval and auto-suggesting resolution

OYO - Oravel Stays Pvt. Ltd. | Price Elasticity estimation May - July 2018

- Designed a **prediction model** in **R** that predicts the likelihood of achieving certain profit from the current situation
- Implemented density-based clustering using **HDBSCAN density cluster model** to remove the outliers
- Implemented **two-stage least squares** instrumental variable model to remove biases in explanatory variables

Darwin Travel Tech | Tour Package December 2017

- Developed **text classification** model using python based Natural Language Toolkit to extract information
- Developed **Java Spring** Platform to automate generation of itinerary for a tour package with minimum cost possible
- Reduced the time taken by API calls using **multi-threading** to get transport, hotels and activity details

ACADEMIC PROJECTS

Quantum Gate Optimization | R&D project Autumn 2019

- Critically analyzed advantages of GrAPE with **Push-Pull optimization** and RL approaches like **Q-learning**, Deep-Deterministic **Policy gradient** methods and evolutionary RL for improving existing bounds for gate fidelity

Features of XV6 | Operating Systems Autumn 2018

- Examined xv6 source code and implemented process scheduling algorithms like round robin and priority-based.
- Implemented Memory management techniques like **lazy page allocation** and applications of **pthreads**

TECHNICAL SKILLS

Software Skills C/C++, Python, Java, R, Git, MATLAB, OpenCV, GNU Make, Android Studio, Django
Deep Learning & CV PyTorch, TensorFlow, Keras, TensorFlow Quantum, OpenCV

EXTRACURRICULAR ACTIVITIES

- Part of the Inter IIT contingent securing **Runner's Up Position** at Inter IIT Tech Meet held at IIT Bombay 2018
- Awarded **Hostel Player of GC (Carrom)** for best performance in Inter Hostel Sports, IIT Bombay 2016
- Completed a year-long course in **Athletics** offered by National Sports Organization (**NSO**), IIT Bombay 2016