

Pursuing a minor in **Computer Science & Engineering**.

## ACADEMIC ACHIEVEMENTS

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- Achieved All-India Rank **285** out of 173,000 participants in **JEE (Advanced) 2019** (May 2019)
- Awarded a **Gold Medal** in the **Dr. Homi Bhabha Balvaidnyanik Competition** (May 2016)

## PROFESSIONAL EXPERIENCE

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**Quantitative Research Intern | AlphaGrep Securities Pvt. Ltd** (May-Jul 2022)

- Secured the internship via apping, within **two weeks** of my Schengen **VISA rejection** for former internship offer at **Optiver Services B.V.** acquired through the institute placement cell
- Developed a **data-analysis tool** in python used by a team of **10 members** to design strategies on generated alphas by **plotting backtest results** modifiable by interactive sliders
- Researched and backtested **50+** designed and **improved alphas** using the developed tool
- Explored methods to **detect** and **capitalize** on market moves brought by NSE index **earnings**

**Full-Stack Intern | MeTripping Technologies Pvt. Ltd** (May-Jul 2021)

- Developed a **web scraping spider** using the **scrapy python library** to scrape weather data daily, of over **20 thousand** travel destinations, **without expenses** on the websites API calls
- Designed a **Django Backend application** along with **Angular Frontend APIs** to communicate and log various user interactions such as clicks, selects, promo code entries amongst others
- Built a **Backend API** in python, to provide updated weather data for a weather **landing-page**

## TECHNICAL PROJECTS

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**Parampariyam | Course Project** (Apr-May 2022)

Guide: *Professor Gaurav Kasbekar* | Electrical Engineering Department, IIT Bombay

- Probed the **Bitcoin white paper** to conceptualize and **design** our own file transaction **blockchain**
- Introduced **node hierarchies** to ensure a private network and **mathematical analysis** backed **transaction tax** to manage the circulating supply of the networks parampariyam coins
- Implemented the revamped blockchain in python using django-framework and **cryptodome libraries** with the **versatility** to include **additional features** above the originally devised ones

**Autonomous Ball Collector** (Aug 2020)

Guide: *Unmesh Mashruwala Innovation Cell, IIT Bombay*

- Worked in a **5 member team** and built a **fully functional autonomous robot** in Gazebo-ROS simulation software, which was capable of gathering green and simultaneously discarding red balls
- Made use of **LIDAR, Camera** and **SONAR sensors** to perceive the simulated environment and performed the appropriate action, on the basis of **OpenCV** and **ML techniques**

## POSITIONS OF RESPONSIBILITY

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**Teaching Assistant | Department of Mathematics, IIT Bombay**

MA 109 (Calculus I) (Nov-Dec 2020) & MA 205 (Complex Analysis) (Aug-Sep 2021)

- Responsible for **conducting weekly tutorial sessions** for a batch of 40+ juniors, clearing conceptual doubts through personal interaction and helping them cope with their first online semesters
- Assisted the Professors in **planning course logistics** and preparing tutorial solutions

## EXTRACURRICULARS & MISCELLANEOUS

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- Emerged victorious in the **football tournament** held as a part of AlphaGrep Sports Meet (2022)
- Successfully completed **80 hours** of training in **swimming** under the **NSO** programme (2020)
- Developed a **mobile controlled robotic car** in a team of four and successfully navigated a challenging **obstacle course** as part of the **XLR8** competition (2019)
- Awarded the **Gem of the Year** award in school, for proving to be a **symbol of excellence** (2017)
- Awarded as **best speaker** in the 1st school simulated Model United Nations Conference (2016)
- **Speaker** in the Frank Anthony Memorial All India Inter School **Debate Competition** (2015)