Shyam Iyer

Engineering Physics

Indian Institute of Technology Bombay

190040116

UG Second Year

Male

DOB: 18/10/2001

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2021	8.86

ACADEMIC ACHIEVEMENTS

- Awarded a Change of Branch to the **Engineering Physics** discipline among 8 out of 1000+ students *(2020)*
- Secured **98.46 percentile** in JEE Advanced and **99.43 percentile** in JEE Main Examination *(2019)*

KEY PROJECTS

InstiDelivery | Institute Technical Summer Project   Mar '20 - Jun '20

Selected in the Top 3 Projects out of 64 teams after rigorous evaluation by the Institute Technical Council

- Developed an Autonomous Drone Delivery system using **Robot Operating System (ROS)** in **Ubuntu**
- Simulated three quadcopters in **Gazebo Simulator** to deliver packages over a maximum distance of **2.0 km**
- Constructed a virtual model of IIT Bombay campus using satellite data in **Blender** as a map for the simulation
- Designed a website in **Django** backend along with a real-time tracking system via **Bing Maps** in **JavaScript**

Game Theory | Summer of Science   Apr '20 - Jun '20

Self learning project mentored by an experienced senior under the Maths and Physics Club of IIT Bombay

- Learned key concepts of Game Theory such as **Nash Equilibrium**, **Backward Induction** and applications
- Studied lecture video content of the online course ECON 159 Game Theory offered by **Yale University**
- Documented my learnings in a **10,000** word report and analysed a **case study** on Discussion in Game Theory

Junior Dynamics Engineer | Team Hyperloop IITB   Jan '20 - Aug '20

Part of a 30 member team involved in designing and building a functioning prototype Hyperloop pod

- Worked on the **COMSOL Multiphysics** platform to develop simulations of **magnetic brake models**
- Conducted research on Lateral Control Modules, **Electrodynamic Wheels** and **Halbach Array magnets**
- Designed magnetic array brakes for the **Arizona DesertLoop** competition, selected for the **final round**

LEADERSHIP AND ORGANISATIONAL EXPERIENCE

Literary Arts Convener | Institute Cultural Council, IIT Bombay   May '20 - Present

Part of a 6-member council organising Literary Arts events for a 10,000 strong student community

- Created content for **60+** campaigns under LitBlitz increasing the club's online presence over **12 fold**
- Coordinated **15 events** under the flagship Battle of the Batches clocking **12+ hours** with **100+ participants**
- Ideated, curated and hosted the first ever Online General Quiz among **30 top quizzers** over a virtual medium
- Co-ordinated the Inter IIT Scrabble League with **370+ participants** and **750 matches** among **7 top IITs**
- Responsible for maintaining the college quizzing blog which amassed **80,000+ hits** in two months

Publicity Coordinator | Techfest, IIT Bombay   May '20 - Dec '20

Working in a team of 8 to publicize Techfest and its various events to 2500+ colleges across India

- Managing and writing content for social media accounts namely Facebook (**3 million+** followers), Instagram (**42.5K+** followers), Twitter (**18.7K+** followers) and LinkedIn (**14K+** followers) for Techfest.
- Directed a team of **20** organizers to maximise the online presence of Techfest across social media platforms

TECHNICAL STRENGTHS

Programming Languages	C++, Python, ROOT, MATLAB, Java, JavaScript, LaTeX, HTML5, CSS3
Software	Git, ROS, Solidworks, AutoCAD, COMSOL, Photoshop, Premiere Pro

EXTRACURRICULAR ACTIVITIES

Quizzing & Literary Arts	• Awarded **Par Excellence in Quizzing** in 2016, 2017 at G.D. Somani Memorial School • Qualified to the quarterfinals of the Institute Scrabble League out of **80+** participants
Social Work	• Raised funds for the **Terry Fox Foundation** towards cancer research for **3 years** • Visited the **Leprosy Mission Trust** Vocational Training centre in Nashik, Maharashtra
Sports & Culturals	• Completed a year-long training in **Athletics** through the National Sports Organization • Certified **Green Belt** holder by the Shotokan **Karate-Do** International Federation • Performed the Acoustic and Bass **Guitar** in multiple school competitions over three years