

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2020	8.07

## SCHOLASTIC ACHIEVEMENTS

- Pursuing a minor degree in **Mathematics** (2018)
- Secured **AIR 864** in **JEE Advanced** from amongst 0.2 million+ candidates (2018)
- Awarded **Kishore Vaigyanik Protsahan Yojana (KVPY)** fellowship (**AIR 295 in SA & AIR 270 in SX category**) out of 0.1 million candidates organized by IISC, Bangalore (2015)

## POSITIONS OF RESPONSIBILITY

**Marketing Coordinator | Abhyuday, IIT Bombay** (December 2019 - January 2019)

*Social body of IIT Bombay*

- Created an extensive database with details related to various CSRs in India
- Invited 20+ CSRs to participate in the Annual Social Fest of Abhyuday, IIT Bombay
- Handled multiple sponsors as the point of contact during the Annual Social Fest.

**Events Co-ordinator | Informals | Mood Indigo, IIT Bombay** (July 2019 -Present)

*Asia's largest College Cultural Festival | Footfall 143,000*

- Incentivised participation for flagship competitions by facilitation of international opportunities for winners
- Conceptualizing customized integrations to facilitate interactive **BTL activations** for various sponsors
- Enhancing experience of **100,000+** visitors Judges by assembling lounges strategically placed in 550+ acres
- Spearheaded negotiations with artists and vendors to curate unique events in the festival

## KEY PROJECTS

### SWARM ROBOTICS

(June-July 2019)

*Institute Technical Summer Project | Electronics and Robotics club*

- Built a system of 5 bots capable of **autonomously** coming into various formations and shapes, implementing **master-slave robotics** using **Image Processing** via **OpenCV** to locate the instantaneous position of bots
- Implemented **socket programming** in **NodeMCU** to connect bots and PC and communicate over **WiFi**
- Applied **Proportional Integral Derivative(PID)**, a mechanism to minimize error & execute path following.

### Autonomous Path Finer - Line Follower

(February 2019)

*Electronics and Robotics Club | IIT Bombay*

- Secured **2nd position** in building **autonomous** bot capable of following particular path using **IR Sensors**
- Implemented **Proportional Integral Derivative(PID)** algorithm using **Arduino** for controlling **L293D**
- Implemented **decision tree** to negotiate turns in all directions and to handle terminal cases

### OPEN-LOOP DC MOTOR SPEED CONTROL

(Spring 2019)

*Course project | INSTRUCTOR- M.B. Patil*

- As a team of 4, built a speed regulator for DC motor
- Concept of **Pulse width Modulation** was used to vary the duty cycle of **IC555** timer
- A dip switch was used to vary the speed by controlling resistance in the IC555 loop

## EXTRACURRICULAR ACTIVITIES

- Chief speaker in **Inter IIT Tech Mechatronics Bootcamp** on **Embedded systems(Arduino)**
- **Technical Skills:** C++, Python, HTML, MATLAB, AutoCAD, SolidWorks,  $\text{\LaTeX}$
- Completed certified course on **GENERAL ASTRONOMY & STELLAR LIFE CYCLE** (2019)
- Built **remote controlled Bluetooth connected bot** with microprocessor At-tiny & HC-05 module (2018)
- Secured **Second Position** in **ENB buzz(E-Cell)**, a business model canvas competition (2018)
- Secured **First Position** in **ResearchX Hackathon**, conducted by Undergraduate Academic Council, for presenting efficient, low cost solutions for water conservation in the institute (2019)
- Went to a trip to **Giant Metric Radio Telescope (GMRT)**, Khodad, Pune organized by **Krittika**, The Astronomy Club and learned about telescope installation and locating constellations (2019)
- Have attended **CHAI AND WHY** session on **Image of black hole** (2019)
- Built **Xyloband** using Op-Amp in Get-Electrified Session by Electronics and Robotics club. (2019)
- Have attended lecture conducted by TIFR on **STRONG AND WEAK INTERACTIONS.** (2019)
- Successfully completed year-long training in **Athletics** under **National Sports Organization** (2018)