



An Engineer from IIT Bombay (Electrical) with proficiency in programming, scripting and software development.

Ability to persevere and deliver results is my key strength.

Scholastic Achievements

- Secured **All India Rank of 151** in IIT JEE Advanced 2013 among **0.15 million** students
- Secured **All India 99.85 Percentile** in IIT JEE Mains 2013 among **1.3 million** students
- Recipient of Merit-Cum-Means **Scholarship** for being in **top 25%** of IIT Bombay students

Software Skills and Programming Languages

- Programming** : Python, C, Data Structures, Algorithms
- Platforms** : MATLAB, Octave

Work Experience

Xilinx India Technology Services Pvt. Ltd.

Feb 2019 - May 2019

- Worked on the proprietary **Video Transmission Intellectual Property** based on FPGA
- Scripted code in **Python** for interconnection of JSON modules of ports on FPGA board
- Worked with the video compression and decompression modules written in **C language**
- Closely appraised and understood the proprietary Video IP codec technology in detail

Academic Record

Examination	University	Year	CPI / %
Graduation / B.Tech.	IIT Bombay	2018	6
Intermediate	HSC	2012	86.33
Matriculation	CBSE	2010	94

Development experience

Cryptocurrency: Blockchain Technology | Project (Python)

- Developed a **Web Application** with functionalities like **adding** transactions, **mining** new blocks, **updating** the blockchain
- Blockchain secured by **Hash** and **Proof of work** in every block; **Public** and **Private key** pair used for validating transactions
- Resolved conflicts of different versions of blockchain at localised nodes using **Consensus Algorithm** for final valid chain
- Web Application hosted on **local HTTP server** set up using **Flask package**; code scripted using **Object Oriented Programming**; web UI developed using **HTML**

Web Development | Project (Django 2 & Python)

- Developed **3** websites: **Product Hunt clone**, **Personal Portfolio** and **Word Counter**
- Worked with **Django's URL routing**, function and class based views, models; connected the websites to **SQLite** and **Postgres** databases
- Made responsive websites with the help of **Bootstrap 4**; icons added via **Iconic**
- Submitted and handled **HTML** form data; websites hosted on **local HTTP server**

Research project

Bicycle Pooling System | B.Tech Project (MATLAB)

- Developed **algorithms** implementing a model of **Bicycle Pooling System**, given a city's **Population Distribution Function**
- The optimum locations of the bicycle renting stations were found by simulations using **K-means clustering algorithm**
- Algorithms were based on the **Demand based network planning methods of cellular mobile network models**

Projects/ Academic Assignments

- **Low-Cost 2 Mbps Plastic Optical Fibre Link** : Developed low cost device that can serve as replacement for RS422 link; enabling sending signals at data rates of upto 2Mbps
- **Skill Gap Analysis-Case Study : Wada block** : Surveyed **50+ villagers** in **6 villages** for finding existing skillset. Surveyed **15+ industries** for finding expected skillset in labour
- **Broadband Power Combiner** : Simulated RF frequency broadband power combiner, which allows 1-to-N or N-to-1 power division and combination for any arbitrary N
- **Estimation of Gravitational Acceleration** : Tracked the movement of simple pendulum to obtain voltage-time data. Performed calculations to find acceleration due to gravity
- **Silicon Nanowire Bi-Stable Resistor** : Showed bi-stable current-voltage behaviour in 2-terminal device structure. Can be implemented for memory, optical processing devices
- **Relationship b/w Electricity Consumption & Rural Household Development** : Surveyed **160+ village households in 4 villages**; analysed village & community level

Responsibilities / Organizations Involved In

Events, Coordinator | Techfest, Asia's largest technical festival

- Organized the event **Magneto** held for the first time which involved **80+** participant teams and handled its pre-event planning
- Spearheaded team of approximately **10** organizers and delegated for outstanding execution of event
- Strategically and effectively promoted the competition and made it one of the most popular events of Techfest

Pronites, Coordinator | Mood Indigo, Asia's largest college cultural festival

- Part of a team of **16** coordinators responsible for executing **4** professional concerts, catering to **60,000+ people** across **4 days**
- Led a team of **20+** organisers from backstage, headed food, transport & accommodation arrangements for **40+** artists
- Ideated and executed **Livewire**, a semi – professional band competition, which oversaw **50+** competitors from all over India

Other Interests & Achievements

- Completed 2-semester **National Social Services-Green Campus** course, planted around **120+** trees, produced organic manure from food wastages of Hostel Messes
- Professional **Half-Marathon (21.1 km) runner** & enthusiast **mountain climber**
- Participated in **Line Follower Robot competition, XLR8 Racing competition, RC Plane making competition** at **Electronics and Robotics Club** of **IIT Bombay**
- Volunteered for Antarchakshu, a social initiative of Abhyuday, IIT Bombay
- Amateur in playing Table Tennis, Badminton, Cricket, Chess and Swimming
- My hobbies include reading fiction novels, reading and writing poetry, travelling and trying out new cuisine from different places