



Kalpesh Krishna
Electrical Engineering
Indian Institute of Technology Bombay

140070017
UG Second Year
Male
DOB: 30/11/1996

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2016	9.53
Intermediate/+2	CBSE	Army Public School, Pune	2014	98.20
Matriculation	ICSE	St' Mary's School, Pune	2012	98.60

ACADEMIC ACHIEVEMENTS

- Ranked **6th** in the department among 140 students on CPI basis.
- Secured two **AP Grades** for being in the top 1% of the courses **Basic Biology** and **Computer Programming and Utilization**.
- Amongst the **top 10 in India** at the **Astronomy Olympiad OCSC** (Orientation Cum Selection Camp) for the International Olympiad for Astronomy and Astrophysics '14.
- Cleared the first round of the **Physics Olympiad (NSEP)** and **Chemistry Olympiad (NSEC)** by being one amongst the top 300 in India.
- Secured an All India Rank of **93** in **JEE Advanced '14** among 14 lakh candidates.
- Secured an All India Rank of **34** in **JEE Mains '14** among 14 lakh candidates.
- Secured a **National Rank of 2** in **ICSE '12** and was the **city topper** in JEE Advanced '14, JEE Mains '14, CBSE '14 and KVPY '14.
- Won the **Kishore Vaigyanik Protsahan Yojana '14 (KVPY)** Fellowship Award.
- Awarded by the **Army Welfare Education Society** for the *best academic performance* in Army Schools in CBSE '14. Won the *General Proficiency Prize* for 10 years in school.
- Pursuing a Minor Degree in Computer Science and Engineering.

PROGRAMMING SKILLS

- **Languages:** PHP (with Laravel 4), C/C++, Python (with Django and OpenCV), Java (with Android), JavaScript (with NodeJS and AngularJS), Arduino, Bash, \LaTeX
- **Tools:** NgSpice, Adobe Photoshop, AutoCAD, Git, MATLAB/Octave, Processing

WORK EXPERIENCE

Core Backend Developer, Pickup **March '14 - Present**

- Implementing the backend for a recently launched startup - *Pickup*, a ridesharing service.
- Built **RESTful APIs**, designed an **ER Model Database** in **PHP** using the *MVC Framework Laravel 4*. Developing algorithms for the same.

In-sem Internship, Codechef **January '15 - February '15**

- Built and maintained a **question bank** as a part of **Codechef for Schools**, an initiative to help high school students start competitive programming.
- Wrote and reviewed **editorials** for the recently added problems on Codechef.

POSITIONS OF RESPONSIBILITY

Convener, Web and Coding Club - IIT Bombay **April '14 - Present**

- **Coordinating events** of one of the largest programming clubs in India aimed at inspiring students to take up programming as a hobby.
- Organised institute-wide workshops to **train more than 100 students** in MIT-Scratch and Linux Essentials.

Coordinator, Mood Indigo - IIT Bombay **July '15 - Present**

- Working as part of a team to develop **Web and Android applications** for Mood Indigo, Asia's largest college cultural festival.

PROJECTS

Web Platform Tests Viewer

James Graham, A-Team, Mozilla

November '15 - Present

Mozilla - Quarter of Contribution

- Developed a web app using **AngularJS** and **IndexedDB** to carry out efficient filtering and comparisons of Web Platform Tests results between browsers such as Gecko and Servo.

Pyraminx Utility Kit

Prof. Kavi Arya

Spring '15

CS 101 Project

- Implemented **BFS graph algorithm** and **AVL trees** to derive mathematical results about the **optimal solutions of a Pyraminx**, a tetrahedron Rubiks Cube style puzzle.
- Used C++ and Allegro to design an interface to help solve pyraminx optimally, find cube algorithms and generate solve analysis.
- Designed an Android app implementing **image processing techniques** to read pyraminx configurations and send it to a Java server to be solved.

Mesh Networks

Prof. Abhay Karandikar

Summer '15

NCETIS, Institute Technical Summer Project

- **Android app** which implements **routing via Bluetooth** using a **Gnutella style flooding algorithm** to send text messages via a chat application.
- Moving this to EtherHoc OpenWRT hardware as a part of NCETIS.

Holographic Touch Screen

Electronics Club - IIT Bombay

Summer '15

Institute Technical Summer Project

- Designed an **Infrared LED lined frame** interfaced with **Arduino** to determine the precise location of an object placed in this frame. Used this **frame as a touch screen** for a **hologram** created using parabolic mirrors and an LCD display as the object.

OPEN SOURCE

- **Contributing** to Mozilla, primarily in the **Automation and Tools Team** (working on **Web Platform Tests** and **Treeherder**), **Firefox OS** (SMS app) and **Fennec**.
- Active member on **Github** with a number of personal projects in *image processing*, *Python scripting*, *BASH*, *NodeJS* and *Javascript*. Made first ever Hindi *Git* guide.

TECHNICAL ACHIEVEMENTS

- **Runner Up** (4-person team) at the **Microsoft code.fun.do '15** hackathon.
- Stood **7th** in the country in **Technothon, Techniche '10, IIT Guwahati**.
- Attended **Infosys, Catch Them Young** and won the best group software award.
- Stood **1st** among 200 freshmen at **WnCC - Scratch Day '14**. Stood **2nd** among 100 freshmen at **WnCC - Website Making '14**.

EXTRA CURRICULAR

- **Karate :- Black Belt First Dan** trained in *Kyokushin Kai* for seven years.
- **Abacus :- Grand Master** in *Aloha Abacus and Speed Maths*.
- **NIE Student of the Year '11** for all round performance.
- **Filmmaking :-** Actor in the winning video for *Freshiezza - Copy a Scene*, *Freshiezza - Music Video*, and lead actor in special mention video for *Freshiezza - Music Video*.
- **Football :-** Completed **NSO** (National Sports Organization) in Football. **Finalist** at *Fresher's Football League*. Part of **Inter Hostel General Championship team**.
- **Other :-** **1th** at *Wolf of Wall Street*, *E-Cell IIT Bombay*, **Designed Logo** for filmmaking YouTube channel, **Quizzer** at inter-school level, **3rd** at *Mood Indigo Treasure Hunt '14*
- **Interests :-** **Star Gazing, Jogging, English Music, Travelling and Reading**

Self motivated, passionate and always striving towards excellence.