Yashvardhan Didwania

didwaniayashvardhan@gmail.com & Github & Webpage

EDUCATION _

• B.Tech Jul '16 - Present Indian Institute of Technology, Bombay **CPI - 8.73**

Major in Electrical Engineering

• Intermediate Apr '16 Delhi Public School, Megacity 95.60%

Indian School Certificate Examination (ISC)

• Matriculation Apr '14 94.80%

Delhi Public School, Megacity Indian Certificate of Secondary Education (ICSE)

ACADEMIC ACHIEVEMENTS

- Pursuing a Minor in **Computer Sciences and Engineering** (CPI 9.0).
- Secured an All India Rank 415 in JEE Advanced '16 among 0.2 million candidates.
- Achieved 99.7 %ile in JEE Mains '16 among 1.2 million candidates.
- Ranked 1st in WBJEE '16 among 0.12 million candidates in Engineering.
- National Top 1%(among 40,000) in the preliminaries for the Indian National Chemistry Olympiad(InChO).
- Amongst Top 1% in the State in the preliminaries for the Indian National Physics Olympiad(IPhO).
- Secured an All India Rank of 465 in the Kishore Vaigyanik Protsahan Yojana(KVPY) '16.

EXPERIENCE

• Mozilla Foundation May '18 - Aug '18

Google Summer of Code student under Jonas Finnemann Jensen

Mumbai, India / San Francisco, CA

- Selected for the prestigious Google Summer of Code program to work on their Pulse-inspector backend for Taskcluster(under the Release and Productivity team).
- o Created backend api enpoints that allow browser applications to listen to arbitrary Pulse messages.
- Used Server-Sent Events in the nodejs backend, with sufficient error handling capabilities.
- Updated the pulse-inspector browser application to use the new event-stream protocol.
- o Attended the All Hands at San Francisco and Orlando to discuss about Taskcluster and its future .

 LendIt Iun '17 - Dec '17

Seasons of Code '17

Web and Coding Club, IIT Bombay

- LendIt is an online platform meant to bridge the gap between book lenders and borrowers.
- Migrated the web application of LendIt to an Android App for better user experience.
- Exposed REST APIs on Django Server to get the ISBN from the Android App and provide the neccessary details of the book obtained from Google Books API back to the app.
- Used Graph API by Facebook to fetch details about the user and create a User Profile in the database.

TECHNICAL PROJECTS _

 Court Piece Dec '18

Inter - IIT Tech Meet

[Code] Hackathon

- Built a modular HTML5 framework for multiplayer card games to be played with Android phones.
- Developed the android app to be used as the soft controller for each player in the game.
- Different devices are managed and the state is synced using a REST api calls to the central server.

• Processor Design Prof. Virendra Singh Jul '18 - Nov '18

[Code] Microprocessors

o Designed and simulated a 6-stage pipelined 16-bit RISC processor based on the IITB-RISC ISA.

- Synthesized the pipelined processor on FPGA and demonstrated using SignalTap Analyzer.
- Designed, simulated and synthesized a Multi-Cycle RISC processor based on the same ISA.

 Mood Indigo May '17 - Aug '17 Mood Indigo, IIT Bombay

Website

Built the frontend of the website with animations including a rotating Ferris Wheel using Jquery.

- Implemented the backend for CR Portal using Django and REST API framework.
- Created a custom System Panel comprising of email functionality to ensure maximum productivity.
- All the code was reviewed and perfected before being pushed to production.

• Microprocessor Controlled LED Cube

May '17 - Jun '17

Institute Technical Summer Project Web and Coding Club

- o Developed an 8x8x8 LED Cube using **Shift Registers**, **MOSFETs** and **Arduino**.
- Wrote a Python script which provides serial input to Arduino to control the ICs.
- Used a high refresh rate of LEDs to display letters and various patterns on the Cube.

• Stopwatch using TTL ICs

Prof. M B Patil

Feb '17 - Mar '17

Electronics(Course Project)

- o Devised a logical circuit that provided **start** , **stop** and **pause** features upto unit second precision.
- Displayed the final result on Seven Segment Displays minimizing the circuit.
- Used a combination of **timer** and **counters** to create the circuit.

Positions of Responsibility

• Manager - Web and Coding Club, IIT Bombay

Apr '17 - Mar '19

- o Lead a team of 20 sophomores, part of one of the biggest college technical clubs in India, to cultivate and sustain a hobbyistic programming culture and conduct activities in the institute.
- Ensured completion of several open-source projects in the Seasons of Code held in Summer.
- o Guided 100+ first year students in making their first app using MIT Scratch and conducted the Git and Android workshops to introduce students to the basics of programming.
- o Developed an Internship Portal in Django to connect startups, professors and companies with students seeking internships. We currently have over 1000 students and 40 internships on our platform.
- o One of the Founding Members of the GSoC Inncubation Cell to guide students in getting started with **Open Source** and encourage more participation in GSoC.
- Web and Tech Coordinator Mood Indigo, IIT Bombay

May '17 - Present

- Asia's Largest College Cultural Festival | 1,39,000 footfall. | 230+ events
- o Developing websites, apps, portals for **Mood Indigo**, **2017** that receive over **6.5 million** hits yearly.
- o Managing a team of over 50 organizers to conduct and execute events in Mood Indigo 2017.
- Responsible for the technical materials brought for Mood Indigo like spider camera and quadcopters.
- Web Secretary Electrical Engineering Students' Association

Apr'17 - Present

- Created and managed **online elections** for various posts in the department using Gymkhana portal.
- Updated the EESA website with latest data and events of the department.

TECHNICAL SKILLS

• Experienced: Python, Django, Javascript (with AngularJS, nodejs), HTML, CSS, VHDL

: C/C++, Java(with Android), OpenCV, Bash, PHP, Arduino, Go • Familiar

Tools : git, ngSpice, vagrant, Quartus, LATEX, TensorFlow, gem5

KEY COURSES

- Electrical Engineering Data Analysis and Interpretation, Network Theory, Signals and Systems, Analog Circuits, Microprocessors, Probability and Random processes
- Computer Sciences Computer Programming & Utilization, Computer Networks, Data Structures & Algorithms, Automata Theory, Introducing to Machine Learning, Network Security & Cryptography
- Mathematics Complex Analysis, Calculus, Linear Algebra, Differential Equations
- Others Quantum Physics and Application, Electricity and Magnetism, Economics, Psychology

EXTRA CURRICULARS

- Secured 2nd position in the Jio hackathon organized as part of the 7th Inter-IIT Tech Meet '18
- Secured 1st position in Stratazenith, a game theory based event conducted by IGTS in Techfest'17
- Completed a two semester course offered by National Sports Organisation in Squash.
- Participated in Institute Squash Freshmen Open and Aavahan,IIT Bombay.
- Completed the Yahoo! HACK U '17 campus hackathon successfully.
- Member of Best freshmen team in Logic GC '16 conducted by Maths and Physics Club
- Successfully completed a **Level A1 Chinese Course** in Jun '11.

INTERESTS _

- Technical -Web Applications, Data Science, Database management, Automation.
- Other Reading, Travelling, Cycling, Music, Gaming