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B.Tech.
Gender: Male
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Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2024	

Pursuing a **Minor** in **Computer Science and Engineering** from the Computer Science and Engineering Department

SCHOLASTIC ACHIEVEMENTS

- Achieved **All India Rank 466** in **JEE Main** out of **1.2 million** candidates (2020)
- Awarded the Kishore Vaigyanik Protsahan Yojana (KVPY) fellowship with **AIR 290** in the SX stream (2019)
- Ranked among national **top 1%** in **National Standard Examination in Chemistry** (NSEC) (2019)

KEY PROJECTS

Artizaar - A Bazaar for Artists

Jun'22 - Jul'22

Self Project | App Development

- Developing a **cross-platform** mobile **e-commerce app** using Flutter SDK in integration with **Firebase and MongoDB** where users can **connect** with each other and **buy/bid and sell artworks** online
- Designed and developed a responsive user interface using **Dart & Flutter** with features to **upload artworks** for sale, save artworks, do **real-time bidding**, edit profile and **follow** other users
- Implementing the backend with **NodeJS** and integrating it with frontend using **Model-View-Controller (MVC) architecture**

Tech Points Portal [Ongoing Project]

May'22 - Jul'22

Seasons of Code | Web and Coding Club IITB

- Working on the frontend and backend of a website which will be used by students and Tech clubs at IIT Bombay for **distributing points** which can be used to **redeem prizes** using the **MERN** stack
- Successfully implemented **user authentication and authorization** via SSO login using **OAuth Protocol**
- Developing **RESTful APIs** for CRUD operations such as **fetching user data**, allowing students to **redeem prizes** using the points earned, keeping track of **transaction history**, allowing clubs to **award points** and **upload prizes**

Algorithm Visualizer

May'21 - Jul'21

Seasons of Code | Web and Coding Club IITB

- Studied **Data Structures**, ADTs and **Pathfinding Graph Algorithms** and their implementation in C++
- Designed and developed the user interface for a **responsive** web application using **React** which allows **visualization** of multiple **Pathfinding Algorithms** along with manual and automated maze generation
- Implemented smooth **animations** demonstrating how chosen algorithm finds a **path** using **JavaScript & React Hooks**

RISC 16 bit Processor

Jan'22 - Apr'22

Course Project | Microprocessors

Prof. Virendra Singh

- Worked in a team to design an efficient, scalable **16 state FSM** for a 16-bit **multicycle** processor, eight registers and a RAM having an Instruction Set Architecture of **17 operations** with 3 instruction formats
- Synthesized and assembled **ALU**, **Memory unit**, **FSM controller** and **Datapath** using Quartus Prime in **VHDL**

Predictive Data Analysis of the Indian Premier League

Dec'21 - Jan'22

Winter in Data Science | Analytics Club | IIT Bombay

- Performed **Exploratory Data Analysis** on IPL dataset and developed a forecasting model with an accuracy of **99.67%** in score prediction and about **61.02%** on winner prediction and documented the entire workflow
- Trained and performed extensive hyper-parameter tuning on **Linear**, **Random Forest**, **Support Vector Machine**, **Neural Network** and **XGBoost** regressors to **predict final score** of an innings
- Implemented **Logit**, **SVM**, **Decision Tree**, **Neural Network** and **Random Forest classifiers** for predicting **match winner**

ATM with Authentication

Jan'22 - Apr'22

Course Project | Microprocessors Lab

Prof. Saravanan Vijayakumaran

- Developed an ATM in **Embedded C** by designing a **Finite State Machine** which simulated user actions via key presses on a **keyboard connected to Pt-51 board** using **UART** and displays apt error/success messages
- Implemented user authentication by integrating **password feature** to perform various actions such as **viewing account balance** and **withdrawing cash** in fixed denominations

TECHNICAL SKILLS

Programming	C++, Python, Dart, VHDL, Embedded C, Assembly (8051,8085)
Libraries	Numpy, Pandas, Matplotlib, Seaborn, TensorFlow, Keras, Sklearn, OpenCV
Software Development	HTML, CSS, JavaScript, React, NodeJS, Git/Github, Flutter, Intel Quartus Prime

EXTRACURRICULARS

- Created unique Artworks which were featured in the **Kaladarshan** event organised by **PFA Club IITB** (2021,2022)
- Participated in the **Doodle Designing Competition 'Art To Emancipate'** organised by Abhyuday (2021)
- Secured **1st** rank in the **Energize Quiz** organized by the **Energy Club**, IIT Bombay (2021)
- Successfully completed **year long training** at **National Cadet Corps**, IIT Bombay (2021)