# Vishnu Vinod | ED20B073

vishnuu.com | github.com/zeus-12

## EDUCATION AND SCHOLASTIC ACHIEVEMENTS

| Program | Institution | %/CGPA | Year of Completion |
|---|---|---|---|
| Dual Degree in Engineering Design | Indian Institute of Technology, Madras | 8.23 | 2025 |
| Class XII (CBSE) | SFS Public School, Kottayam | 95.8 | 2020 |
| Class X (CBSE) | Bharatiya Vidya Bhavan, Calicut | 92.2 | 2018 |

- JEE Advanced AIR **3278** (2.5 lakh candidates)
- JEE Mains AIR **4104** (11 lakh candidates)
- KEAM[1] AIR **105** (1 lakh candidates)

## PROFESSIONAL EXPERIENCE

**NatWest**
*Quant Analyst Intern*
*May '24 – July 24*
- Designed and implemented a **highly accurate random sequence generator** using Python and C++.
- Improved convergence rates by **20%**, reduced bias by **24%** over existing methods, yielding better performance.

**Vimaan Robotics**
*Software Intern*
*Dec '23 – May '24*
- Developed a user-agnostic microservice using Spring Boot, Java, Neo4j, Memgraph, Junit, Mochito.
- Optimised Cypher queries through profiling, data modelling, and indexing to ensure efficient data retrieval.
- Migrated queries from SQL to Cypher, improving efficiency of a crucial workflow by **80%** (2s to 0.4s).

**Commenda**
*Software Intern*
*(May '23 – July '23)*
- Built company blog, glossary using Next JS, Nest JS, Notion API as CMS, improved website engagement by **2.2x.**
- Devised a critical part of the onboarding and payment flow using Puppeteer achieving **88%** reduction in latency.
- Deployed scheduler for automated metric loggings to Google Sheets and Email, drastically reducing manual efforts.

**Viak**
*Software Intern*
*(Dec '22 – May '23)*
- Created an NFT display widget increasing engagement by **40%**, and project settings page halving support requests.
- Converted Figma designs and wireframes into high-quality React code; built a reusable frontend UI library.

**CoursePanel**
*Start-up Cofounder*
*(July '22 – May '23)*
- Built a university portal, chatbot to aid **3300+** students to make better academic decisions in selecting courses
- Developed an Academic Operations Platform, for faculty to be atleast **35% more efficient** in program planning
- Consulted a professional academy on curriculum designing and syllabus for teaching software development.

**Accelerate**
*Software Intern*
*(Jan '22 – May '22)*
- Built the back-end for a restaurant chain's food ordering system in Express.js, supporting over 50,000 daily customers.
- Migrated the POS software from **monolithic to microservices** based architecture following MVCS pattern.
- Developed CRUD APIs, implemented JWT authentication; used Electron.js, CouchDB, and Swagger for documentation.

## PROJECTS

**Uxie**
- Built a pdf reader with note taking, annotations, multi-people collaboration support, chat and flashcards using LLM.
- Achieved a peak 50+ DAU[2]. Achieved **2nd** place in IITM Hackathon[3] '23 for the prototype, and **2nd** in Buildschool[4] '23.

**FMHY**
- Built a comprehensive wiki page, search, Discord bot for a Reddit community, serving at peak **20K+ daily active users.**
- Periodically scraped, sanitized, and stored data from their GitHub page, enhancing overall data reliability, accessibility

**JMT Shaastra**
- Collaborated with Shaastra[5] IITM to build a website for Junior Make-A-Thon event, enabling the seamless registration of over 3000 students from all over the country, using Next JS, with Google Sheets serving as the database.

**Ping**
- Built an emergency-alert mobile app, dashboard for on-campus students utilizing Expo, Next JS, Express JS, MongoDB.
- Constructed an Admin Dashboard with real-time location tracking and proximity-based camera feeds triggered by user.

**EverHealth**
- Developed a mobile app encouraging users to complete daily tasks using gamification techniques, using Expo, Firebase.
- Integrated a personalized GPT-4 powered doctor assistant, leaderboard, RSS feeds, dynamic streak, and level system.

## SKILLS

**Proficient**: Typescript, JavaScript, Python, Node, Express, MongoDB, MySQL, Puppeteer, Cheerio, Git, GitHub, HTML, CSS, React, Next JS, React Native, Figma, Tailwind | **Intermediate**: Java, Spring Boot, Nest JS, SQL, Firebase, Redis, Neo4j, AWS, Mocha, Chai, C, JUnit, Mochito, Electron

## POSITIONS OF RESPONSIBILITY

**Tensors[6]**
*WebOps Head ('22–'23)*
- Coordinated and led projects undertaken by Tensors[6] to fund its social campaign project driving **25%** increase in revenue.
- Built web and mobile grievance portals for MP[7] serving Idukki Constituency benefiting **12 Lakh+** citizens with their needs.
- Conceptualized a wireframe, led the product development team, and grew the team size to 6 members

**Saarang[8]**
*DevOps Coord ('20 –'21)*
- Updated and modified Saarang[8] website portal used by over **1,80,000** students from **500+** colleges all around India.
- Built the Saarang '21 leaderboard app, updating points real-time using PostgreSQL, Express, React, Sockets.

## EXTRA-CURRICULAR AND CO-CURRICULAR ACTIVITIES

**Buildschool[4] '22**
- Built Mentora, an academic portal for students to ask doubts, upload notes, course details scraped from IITM website.
- Won 3rd in Buildschool[4] '22, Used Next JS, MongoDB, Redis, Azure Blob Storage, Google Sheets API, Puppeteer, Cheerio.

**Comportal**
- Built Comportal, a complaint portal app, winning 3rd among 80+ students in a 24-hour hackathon by IITM Techsoc Club

**ML**
- Placed **2nd** in a 12-hour ML-Hackathon conducted by SRM University, attended by over 100 participants.
- Achieved an outstanding accuracy of **97.24%,** involving data cleaning, training using the **RandomForestClassifier** model.

**Others**
- Chess FIDE rating 1609, District Champion.
- Hostel Basketball Athlete

**1**-Kerala Engineering and Medical Entrance Examination, **2**-Daily Active Users, **3**-24-hour hackathon conducted by IITM Techsoc club among 100+ annually, **4**- 10-week hackathon by IITM Techsoc club involving 10 teams chosen from 20+ teams, **5**-IITM's annual technical festival, **6**-An NGO run by the students of IITM, **7**-Member of Parliament, **8**-IITM's annual cultural festival