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	8.13	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)
- Developed a **highly accurate random sequence generator**, enhancing numerical simulation convergence.
- Performed comparative analysis, validating algorithm efficacy against existing methods through bias measurements.
- Increased convergence rates by **20%** and reduced bias by **24%**, significantly outperforming previous methods.

Vimaan Robotics
Software Intern
(Dec '23 – May '24)
- Developed a user-agnostic microservice using Spring Boot, Java, Neo4j, Memgraph, and conducted unit testing.
- Optimised Cypher queries through profiling, data modelling, and indexing to ensure efficient data retrieval.
- Migrated SQL queries to Cypher, achieving an **80% performance improvement** in a critical workflow (from 2s to 0.4s).

Commenda
Software Intern
(May '23 – July '23)
- Built company blog, and 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 app with annotation, note-taking, and multi-user collaboration, reaching a peak of **100+ DAU**[2].
- Integrated AI-driven chat with PDFs, flashcard generation with feedback, text autocompletion enhancing user learning.

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

JMT Shaastra
- Collaborated with Shaastra[5] IITM to develop a website for the Junior Make-A-Thon event using Next.js.
- Facilitated the seamless registration of over **3,000** students nationwide, utilising Google Sheets as the database.

Ping
- Built an emergency-alert mobile app, dashboard for on-campus students utilising 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 personalised 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.
- Conceptualised a wireframe, led the product development team, and grew the team size to 6 members

Saarang[8]
DevOps Coord ('21 –'22)
- 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

Uxie
- Built an AI-enhanced PDF reader, winning **2nd** place in IITM Hackathon[3] '23 for the prototype, and **2nd** in Buildschool[4] '23.

Mentora
- 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