Vijay Venkat J

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Education

Indian Institute of Information Technology Kottayam (IIITK)	*May 2027*
B.Tech Computer Science and Engineering	CGPA: **8.77**

Technical Skills

- **Programming Languages:** JavaScript, TypeScript, Golang, Python, C++

- **Database:** MongoDB , PostgreSQL, PineconeDB, MySQL

- **Developer Tools and Frameworks:** Git, Github, Postman, Langchain, NextJS

- **Cloud and DevOps:** AWS, GCP, Azure, Jenkins, Docker, Kubernetes

- **Penetration Testing Tools:** Kali, BurpSuite, OWASP Zap, Nmap, Gobuster, Sublist3r, Nuclei, Ffuf

Experience

Cyber Security Club - IIIT Kottayam *Jan 2024 - Present*
Core Member

- Created **Web exploitation** challenges for **Apoorv CTF 2025**, conducted by CSYClub IIITK. Helped organize the event, which saw **2,349+ users** and **1,247 teams**, managing the event logistics and providing participant support.

- Contributed to the **CSYClub CTF Guidebook**, authoring a section on **file upload** vulnerabilities, covering exploitation techniques and real-world attack scenarios.

Projects

- **ClaimBeaver** (ClaimBeaver) — *LangChain, Next.JS, Redis, RabbitMQ, Prisma ORM, PostgreSQL* **March 2025**

  - Developed an AI-powered **insurance claims resolver** leveraging **Next.js**, **LLM microservices, and RAG** for efficient claim processing.

  - Developed an agentic claims workflow using a locally hosted **LLaMA 3.2 8B model**, which allows on-prem data processing.

  - Optimized back-end performance by integrating **Redis caching**, reducing database retrieval time by **90%**. Implemented **Messaging Queues** for efficient **asynchronous processing**, improving the responsiveness and scalability of the system.

- **Cypher-Cli** (Cypher-Cli) — *Golang, Cobra, AES-CBC, PBKF2, SHA-256* **January 2025**

  - Built a secure **open source password manager** with **AES-256 encryption**,**SHA-256 hashing** and **Zero-Knowledge Architecture** to ensure privacy. Supports cross-platform usage, **browser integration**, and a secure password generator for enhanced security.

- **TimeTable** (TimeTable) — *Next.JS, Langchain,MongoDb,Tailwind CSS* **September 2024**

  - Developed a **intelligent timetable management system** that automates class scheduling while allowing teachers to **dynamically adjust class timings**. Features **conflict resolution**, **real-time updates**, and an intuitive UI, ensuring seamless coordination for institutions

Achievements

- **BITS Goa CTF 2025 – Global Top 10** Ranked 9th globally among 800+ teams in BITS Goa's flagship 48-hour CTF.

- **Winners, DB Cooper 2.0 – The Digital Detective Hunt** Secured first place in an OSINT-focused CTF organized by BetaLabs, IIITK's technical club.

- **Top 3% on TryHackMe** Hands-on expertise in Cybersecurity, CTF challenges, and penetration testing