Thanus Kumaar A

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Education

Amrita Vishwa Vidyapeetham, Coimbatore	**CGPA: 9.09**
B.Tech in Computer Science & Engineering	Sep 2022 – Aug 2026

Experience

LogicFlo AI: *Full-Stack Software Developer Intern (Oct 2024 – Dec 2024)* Completion Certificate

- Engineered key frontend features using React for a live AI platform as part of a 5-member team, while also contributing to backend integration tasks using Django and PostgreSQL.
- Integrated APIs and delivered over 5 production-ready features related to AI tools and AI agents, boosting core feature engagement.
- Implemented advanced features using 4+ external libraries like React Flow and React Tool Builder to craft interactive interfaces. Gained hands-on experience building library-independent components from scratch.
- Followed structured development workflows with daily mentor check-ins and weekly CTO reviews, resulting in consistently production-ready code and fast iteration cycles.

Projects

SustAIn: *React, Flask, ML, Chrome Extension, Vertex AI, AutoML, Express.js (Mar 2025)* GitHub Organization Application link

- Co-developed a browser extension to display real-time carbon emissions and power consumption metrics while users interact with AI-powered web platforms; used by over 25 users. (Submitted for GDG On-Campus Solutions Challenge 2025)
- Trained and deployed a lightweight classification model using Google AutoML and deployed it on Vertex AI to automatically classify user queries and estimate their environmental impact with 98% average prediction confidence.
- Developed backend services with Express.js, integrating 3+ external APIs (Electricity Maps, IP-API, TimeAPI) to generate location-aware sustainability metrics using an in-memory cache with a 1-hour expiry.
- Authored resilient API handling mechanisms featuring retry, fallback, and timeout logic—reducing latency spikes by 40%.

Pragati 2025: *Node.js, MySQL, Express.js, REST API, Swagger Docs, PayU (Mar 2025)* GitHub Repository

- Led a team of 7 backend developers as Co-Lead and Lead Developer for Pragati 2025, an annual national-level B-Fest organized by Amrita School of Business, ensuring the successful development and deployment of the backend.
- Structured and optimized a scalable MySQL database schema, which served 360+ users, streamlining development and reducing refactoring efforts.
- Managed server deployment, MySQL user management, and automated 5-hour database backups using scripts and cron jobs.
- Documented comprehensive Swagger API documentation for 30+ routes, facilitating smooth communication between the backend and frontend teams for effortless integration.

Mediclined: *Next.js, Tailwind CSS, MUI, Express.js, MySQL, MongoDB, ESP32 (Oct 2024)* Application Link

- Created Mediclined, a comprehensive web application for managing college healthcare systems, during a 36-hour hackathon, where the team secured second place.
- Architected a hybrid database solution using 2 technologies—MySQL for structured, relational medical records and MongoDB for unstructured data—to accommodate growing data needs and support flexible query operations.
- Implemented a digital health record system with smart forms powered by regex auto-complete, enabling bulk CRUD operations, reducing manual entry errors by 50%.
- Optimized authentication system with role-based access control (RBAC) using JWT tokens, managing 4 distinct user roles (students, doctors, nurses, admin).

Skill Set

Programming Languages: C, C++, Python, Java, Rust, JavaScript, Go
Frameworks: React.js, Vue.js, Node.js, Flask, Express.js, WebSockets
Databases: MySQL, SQLite, PostgreSQL, MongoDB
Tools: Git, GitHub, Linux, Postman, Hopscotch, Chrome Dev Tools, Figma, VS Code, Chrome extension

Extra-curricular

NSS Volunteering:

- Managed a 6-day NSS Special Camp, managing 50+ students in social work activities, decision-making, and team coordination.
- Coordinated a blood donation camp with 170+ donors and 40+ volunteers, ensuring smooth event execution.