

Nagarampalli Sarvan Kumar

Chennai, India | sarvankumarnagarampalli478@gmail.com | +91 7330673881 | [Portfolio](#) | [Linkedin](#) | [Github](#)

Professional Summary

Full-stack and AI/ML engineer specializing in React/Next.js, FastAPI, and RAG-based systems. Shipped production infrastructure handling 3,500+ real-time transactions, and built ML pipelines spanning fine-tuning, RAG, and quantum circuit optimization.

Education

Amrita Vishwa Vidyapeetham, <i>Chennai Campus</i> , B.Tech in Computer Science and Engineering	2024 - 2028 (Expected)
- Current CGPA: 9.32 Coursework: Database Management Systems, Data Structures and Algorithms and Operating Systems.	
Ascent Classes, <i>Visakhapatnam</i> , Intermediate – 95.9%	2022 - 2024
Sri Chaitanya School, <i>Visakhapatnam</i> , SSC – 97.1%	2021 - 2022

Leadership

Web Architect, <i>Neuronix</i> – Campus AI Club, Amrita Vishwa Vidyapeetham	2025 - Present
Lead technical direction for the club, architecting the Neuronix platform to unify all club administration under one system, cutting manual administrative effort by 70%; organized Flash 2.0 Hackathon.	
Technical Team Member, <i>GeeksforGeeks Campus Body</i> – Amrita Vishwa Vidyapeetham, Chennai	Present
Shipped the website and real-time leaderboard for System Siege, deployed via Cloudflared Tunnel to 30+ teams concurrently during the event.	

Projects

Qrious – Interactive Quantum Learning Platform (React.js, FastAPI, Qiskit) Github Live Link	Jul 2026
- Architected an interactive learning platform that teaches quantum computing to beginners through hands-on modules, live circuit visualization, and guided exercises, structured as a 4-level content hierarchy with Firestore RBAC, Backblaze B2 storage, and LiveKit-based live sessions. - Implemented a QAOA-based personalized learning-path optimizer combining a classical pre-filter with a Qiskit QUBO circuit, reducing 35% of the recommendation search space in 124ms. - Designed a multi-provider AI gateway with a RAG layer over Qiskit documentation; fine-tuned Qwen3-1.7B via QLoRA, published to Hugging Face (<i>Quant-A-Thon 2026, RIT Chennai, team Schrodinger Squad</i>).	
FinShield - AI Loan Agreement Analyzer (Next.js, FastAPI) Github Certificate	Mar 2026
- Delivered an AI-driven loan agreement analyzer processing 5 clause types across bank, NBFC, and credit-card documents with 80% extraction accuracy. - Engineered a RAG pipeline using ChromaDB and RBI compliance guidelines, achieving 83% grounding accuracy on clause-level analysis. - Integrated Groq Llama 3-70B and Sarvam AI, supporting 6 Indian languages with sub-2.3s inference latency for multilingual document understanding. - Secured Top 10 among 155 teams at the DELTABUILD National Hackathon.	
Tantrotsav National Tech Fest Website (MERN Stack) Certificate Live Link	Dec 2025 - Feb 2026
- Executed 20+ zero-downtime production deployments on remote servers, ensuring secure release transfers. - Integrated ImageKit CDN to optimize delivery of 100+ media assets, reducing load times by 40%. - The platform efficiently managed 3,000+ registrations from 2,400+ participants across 8 states, supporting 50+ events with secure transaction handling. - Resolved 15+ payment discrepancies by coordinating with the CCAvenue payment gateway.	

Technologies

Programming Languages: C++, Java, Python, JavaScript and TypeScript

Web Technologies & Frameworks: HTML, CSS, React.js, Next.js and FastAPI

Developer Tools & Databases: Git, GitHub, Docker, Postman, Visual Studio Code, MongoDB, SQL and Cloudflare Tunnel

AI/ML: Hugging Face, LLM Fine-tuning, Prompt Engineering and Retrieval-Augmented Generation (RAG)

Quantum Computing: Qiskit, Qiskit Aer, QUBO/QAOA Optimization, Quantum Circuit Simulation

Open Source: Contributed GlyphMatrix, an animated background component, into the Magic UI library, used by 100+ developers.

Achievements

- Secured **Runner-Up** position in **Code of the Caribbean** competition at **Delta 2K26**, competing against **100+ participants**.
- Developed an AI medication reminder system with chatbot symptom assistance, aiming for **85% improvement** in medication adherence (*Flash 1.0 Winner*).
- Designed a full-stack medical AI suite for rural India, reaching **Top 20 Finalist** in a national hackathon (*Suprathon 2K25*).