

Nijeesh NJ

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EDUCATION

Saveetha Engineering College

B.E. Computer Science Engineering with Cyber Security

2023 – 2027

Chennai, India

– CGPA: 8.3 / 10.0

St. Joseph Pre-University College

Higher Secondary Certificate (PCMC)

2021 – 2023

Bengaluru, India

– Percentage: 84%

WORK EXPERIENCE

Mesa - Agent-Based Modeling Framework

Contributor

Open Source

AI + Full Stack Developer Intern

Ankor - Core Product (XAM Exam Proctoring Platform)

Dec 2025 – Mar 2026

Remote, India

- Contributing to the core AI-enabled exam proctoring system XAM across backend services and AI workflows
- Developing Question and Assessment Management systems using manifest, API-driven architecture
- Involved in early-stage product design and technical decisions for a production-facing platform

AI Engineer Intern

Tech Mahindra - INDUS Project

Oct 2025 – Dec 2025

Bangalore, India

- Built NLP pipelines for document intelligence, OCR processing, and LLM-based Q&A systems
- Designed scalable multilingual preprocessing workflows with noise and bias analysis
- Integrated AI services into internal tools via REST APIs

PROJECTS

Trading Town — Agent-Based Artificial Stock Market

Rust, Tauri 2, React, TypeScript, PixiJS, Genetic Algorithms

- Implemented the Santa Fe Artificial Stock Market (Arthur et al., 1996) as a deterministic, unit-tested Rust engine where traders evolve classifier-based forecasting rules under a genetic algorithm
- Drove the simulation with real exogenous price history, letting bubbles, herding, and volatility clustering emerge from agent behaviour and social-network rule copying rather than scripted logic
- Built a Tauri 2 desktop app with a PixiJS pixel world and per-agent inspector surfacing each trader's active rule, forecast, conviction, and signal usage

Minimo — Observability TUI for AI Coding Agents

Go, Bubble Tea, Terminal UI

- Built an open-source Go terminal UI that monitors AI coding agent sessions across Claude Code, OpenCode, Codex, and Kimi-code from a single view
- Normalised divergent per-provider session formats into one schema to track context usage, cost, and token burn rate in real time
- Shipped as a single self-contained binary with no runtime dependencies, published under an open-source license

Nite — Cursor for Document Workspace

Next.js, WebSocket, SSE, PostgreSQL, Google Gemini

- Built a custom AI agent pipeline with two-pass architecture (search + generation) using SSE streaming for real-time updates
- Engineered a three-layer content system (Markdown, Block Model, TipTap JSON) enabling structured AI editing
- Implemented scalable backend with NeonDB (PostgreSQL), Firebase authentication, and modular API architecture

TECHNICAL SKILLS

Programming Languages: Python, TypeScript

Frontend: React, Next.js, TailwindCSS

Backend: Node.js, FastAPI, Redis, RabbitMQ

AI / ML: LLMs, Agentic AI, Agent Development, Prompt Engineering, Natural Language Processing, Research Paper Implementation

Cloud & DevOps: GCP (Cloud Run, Vertex AI), Docker

Tools: Git, Hugging Face, Ollama, Google ADK

ACHIEVEMENTS

Winner — UI/UX Revamping Competition, IIT Patna

Runner-Up — NIT Trichy Machine Learning Hackathon

Finalist — 100x Engineers Generative AI Buildathon, AWS AI Ascend Hackathon, ASME GRASP Hackathon

Contributor — Toyota Mobility Foundation Smart Transit Challenge, Mesa (Open-Source Organization)