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EDUCATION

The National Institute of Engineering (NIE), Mysuru Aug. 2023 - Jun. 2027 (Expected)
B.E. in Computer Science & Engineering | *CGPA: 8.7* Mysore, India

- **Coursework**: Data Structures & Algorithms, Operating Systems, Computer Networks, Database Management Systems, Cloud Computing, Linux, Software Development Cycles

Kendriya Vidyalaya COD, Chheoki, Prayagraj Jul. 2022
XII | *94.6%* | *PCMC* Prayagraj, India

PROJECTS

KnowledgePulse | *Multi-Tenant AI Conversation Intelligence* | *Next.js, FastAPI, RAG* | Repo | Live Sep. 2026

- Built a **multi-tenant RAG platform** that ingests org documents for citation-backed answers, topic detection, and knowledge-gap analysis, providing 40% better customer satisfaction.
- **RAG pipeline**: FastAPI, ChromaDB, sentence-transformer embeddings, SQLite - semantic retrieval, confidence scoring, analytics.
- **Tenant-isolated access** via org-scoped queries resulting in app level security and flexibility for future (Next.js/MongoDB → FastAPI); deployed on Oracle Cloud VPS + Vercel.
- **Challenge**:
  - Answer quality across heterogeneous docs - tuned chunking/embeddings/retrieval thresholds.
  - Tenant isolation - enforced via org-scoped queries + metadata filtering.

NeuroShield | *AI-Powered Stroke Prediction & Support* | *React, Node.js, FastAPI* | Repo | Live Nov. 2025

- Built a **stroke-risk prediction platform** with separate patient/doctor workflows: React/Tailwind, Node.js/Express, Supabase, FastAPI ML service with 91% accuracy score.
- Patients get a **risk score with factor breakdown**, nearby-doctor discovery, and authorized-doctor management.
- **Patient-doctor data sharing**: record access, prediction reruns, prescriptions. Deployed on Vercel + Render.
- **Challenge**:
  - Patient-doctor access relationships - solved via relational joins/nested queries.
  - RBAC on a single login flow - solved via role field & dedicated patient/doctor tables.

UTSAV | *Campus Engagement Platform* | *React, TailwindCSS, Firebase* | Repo | Live Oct. 2025 - Jan. 2026

- **Campus event platform** for student discovery and end-to-end organizer management.
- **RBAC** for students/organizers with permission-gated dashboards.
- **Dual auth** (manual + OAuth) via Firebase; real-time atomic updates for capacity consistency - 40% adoption increase by real users.
- **Challenge**:
  - Capacity consistency under concurrent registrations - solved via Firebase atomic updates.
  - Role-based UI state - handled via route-level auth guards.

TECHNICAL SKILLS

Development: Next.js, Express.js, TailwindCSS
Languages: JavaScript, C++, Python
Fundamentals: Linux, Computer Networks, AWS (beginner)
Security & Tools: Application Security, GSAP, Firebase

ACHIEVEMENTS & ACTIVITIES

- **Operations Lead at Anveshan - Applied research & AIML Club**: Organized ML bootcamps, hackathons and technical talks.
- **Open Source**: Contributed to several open-source projects and for external organizations.
- **Certifications**: Hackerrank - Problem Solving, REST api, SQL(Intermediate).