M Aman Deol

+91-8096375730 | amandeolm@gmail.com | linkedin.com/in/aman-muppidi | github.com/AmanDeol7

EDUCATION

Vellore Institute of Technology   Vellore, TN
Bachelor of Technology in Computer Science and Engineering with Specialization in Information Security   2022 – 2026
- CGPA: 9.28
- **Relevant Coursework:** Data Structures and Algorithms, Object-Oriented Programming, Operating Systems, Database Management Systems, Computer Networks, Network Security, Web Development

Sri Chaitanya Junior College   Hyderabad, TS
Grade: 984/1000   *2020 – 2022*

WORK EXPERIENCE

AI Project Intern (GitHub)   May 2025 – Present
Bharat Dynamics Limited – Ministry of Defence   *Hyderabad, Telangana*
- Developed a **Multi-Agent AI system** for 30+ defence engineers in **offline, air-gapped environments**, enabling secure **code generation and document analysis** without internet access
- Integrated **TensorRT-optimized local LLMs** and fallback **Ollama runtime** for GPU-accelerated inference; implemented smart routing via **LangGraph** to dynamically dispatch queries to specialized agents
- Built a scalable backend with **FastAPI**, supporting isolated user sessions, concurrent client handling, session cleanup, and GPU resource control
- Engineered tools for **RAG-based document processing** (PDF, Excel, Word, TXT) and a **secure multi-language code execution environment**, with support for scalable, multi-client deployment

PROJECTS

Repair Match | *Next.js, Supabase (PostgreSQL, Auth and Database Functions), Mapbox API* (Demo) (GitHub) 2025
- Built a full-stack repair platform with **Next.js** and **Supabase**, allowing users to post jobs, bid, and track progress
- Built **real-time chat** with **Supabase Realtime** and **PostgreSQL** for instant job-related messaging
- Added secure **auth**, **role-based access**, and live job maps via **Supabase Auth** and **Mapbox API**
- Boosted performance by **40%** through **indexed queries** and caching with **React Query**

CollegeThrift | *MongoDB, Express.js, React, Redux Toolkit, Node.js* (GitHub)   2024
- Built a full-stack e-commerce platform with **JWT authentication**, **MongoDB Atlas**, and modular **RESTful APIs** for product and order management
- Integrated **PayPal sandbox** for secure payments and used **React Router v6** with **Redux Toolkit** for smooth navigation and robust state management
- Boosted performance by **35%** through **RTK Query** caching, **lazy loading**, **code splitting**, and optimized API data fetching

TECHNICAL SKILLS

Languages: Java, Python, C/C++, JavaScript, TypeScript, SQL
Web & Frameworks: Next.js, React, Node.js, Express.js, FastAPI, Redux Toolkit, TailwindCSS, React Query
Cloud & Databases: AWS, Supabase, Firebase, MongoDB, MySQL, PostgreSQL
Tools & ML: Git, Docker, Prisma, Mongoose, LangGraph, TensorRT-LLM, Ollama, Pandas, NumPy

CERTIFICATIONS & ACHIEVEMENTS

AWS Certified Solutions Architect Associate   2024
- Demonstrated skills in cloud architecture, fault tolerance, deployment, and security best practices

Merit Scholarship – VIT Vellore   2024–25
- Awarded for ranking in the **top 10** in Information Security Specialization

LEADERSHIP & ACTIVITIES

Technical Head, ADGVIT   2024
- Led 15+ members to conduct ML and Web Dev workshops for 600+ students; mentored juniors and helped secure nomination for Best Technical Club