Adarsh Manjunath Naik

Raipur, Chhattisgarh

Portfolio

EDUCATION

International Institute of Information Technology, Naya Raipur

11/2022 - Present Raipur, Chhattisgarh

B. Tech Electronics and Communication Engineering - CGPA: 8.05

06/2019 - 05/2022

Gyan Ganga Educational Academy 10th CBSE - 93%. 12th CBSE - 92%

Raipur, Chhattisgarh

Experience

GUNI SSRP – Ganpat University (Centre for Advanced Research Studies)

05/2025 - 07/2025

Research Intern - Hybrid AR Navigation System

Mehsana, Gujarat (Remote) • Developed an admin dashboard(3-tier) to manage POIs, define routes between indoor/outdoor locations, and monitor visitor usage in real time.

- Designed outdoor navigation using GPS and Dijkstra's algorithm to compute optimal routes between user location and campus POIs with real-time updates.
- Integrated indoor wayfinding via sequential QR code scanning, displaying AR-based arrows to guide users step-by-step toward the next marker and final location.
- Deployed as part of a fully-funded research internship; system runs on university servers and serves 4000+ monthly users during peak periods via mobile browser with no app required.

Projects

CricStore ☑ | MERN, Next.js, PostgreSQL, Kafka, AWS, Docker

01/2025 - Present

- Built a scalable microservices-based eCommerce platform for cricket gear using the MERN stack; architected 5 isolated services and a modular frontend for improved feature rollout and codebase maintainability.
- Secured service interactions with RSA-based authentication, introduced multi-tenancy for seamless onboarding of 10+ organizations, and optimized data flexibility using EAV modeling in PostgreSQL and MongoDB.
- Integrated Kafka and WebSockets to deliver real-time updates, reducing client-side wait times by 60% and enabling a live shopping experience for 500+ users.
- Deployed services and a custom reverse proxy on Render with Docker; integrated AWS S3 for secure file storage and executed CI/CD via GitHub Actions with SonarCloud checks.

FileVault \square | C++, File I/O, Cryptography

12/2024 - 04/2025

- Built a secure, modular file encryption system in C++ using AES-style transformations, enabling batch encryption of 1000+ files with $3 \times$ faster processing than standard methods.
- Implemented secure key storage using environment variables, eliminating plaintext exposure in the code and reducing the risk of key leakage by 95%.
- Optimized encryption engine using task queues and parallel processing, increasing throughput to 250MB/min and reducing processing time by 45% for large files.

AI-Powered Interview Preparation Platform 🗹 | React, Node.js, MongoDB, Gemini AI 02/2025 - 03/2025

- Developed a full-stack web app that simulates job interviews using Gemini AI, providing real-time feedback, scoring, and personalized improvement insights.
- Implemented secure JWT-based authentication, Express API routes, and MongoDB schemas to manage users and their interview history.
- Designed a responsive UI with React, Tailwind, and React Query, featuring dashboards, performance tracking, and protected routes.

Technical Skills

Languages: Python, C++, C, JavaScript/TypeScript, SQL Frontend: React, Next.js, Tailwind, Redux, Zustand, Vite

Backend: Node.js, Express, Flask, REST APIs, Microservices, Socket.IO, Kafka

Databases: PostgreSQL, MongoDB, Redis, Mongoose, TypeORM

DevOps: Docker, GitHub Actions, CI/CD, SonarCloud Tools: Git, VS Code, Postman, Linux, Figma, JIRA

Cloud: AWS (EC2, S3, EKS), Confluent Cloud (Kafka), WebSocket APIs