
PROFILE SUMMARY

Builder with strong CS foundation shipping full-stack, production-grade systems end-to-end. Experienced designing scalable apps with Next.js, TypeScript, and AWS, containerizing with Docker, and deploying real-time systems for actual users. Delivered <500ms APIs, 99.9% uptime deployments, and cut cloud costs by 70% through optimized architecture. Great in scalable cloud-native systems and AI-enabled applications, with hands-on experience on Google Cloud (Cloud Run, GCP Console, Gemini APIs).

EDUCATION

B.Tech Computer Science and Engineering
Vellore Institute of Technology, Vellore

[Expected, May 2026]

- CGPA - 7.96 / 10

Relevant Coursework: Data Structures & Algorithms, Database Systems, Operating Systems, Computer Networks, Software Engineering

Engineering Experience

Aarogya – Rural Health Data Platform (Pre-Launch)

Software Engineer | Siraha, Nepal

[Sep 2023 – Jan 2025]

- Engineered a health data collection mobile application utilizing Expo (React Native) for a rural **health startup**, directly serving **underserved communities across Nepal**, **increasing data collection efficiency by 60%**.
 - Designed a **zero-infrastructure backend using Google Sheets API + Drive** (15GB free tier), enabling secure patient data storage **at zero cost — ideal for rural-scale deployments**.
 - Coordinated operations and strategy—health worker logistics, emergency services, and pricing workflows—for rural healthcare delivery, with plans to **serve 1,000+ local residents in early stages**.
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Projects

Uni-Papers.com – AI-powered Academic Sharing Platform

[[Link](#) | [Code](#)]

- Deployed at scale using Supabase and Vercel; achieved 300+ monthly active users with zero downtime in the last 90 days.
- **Implemented efficient search algorithms**, API monitoring with performance alerts, achieving 100% endpoint coverage.
- Implemented **AI Q&A assistant** per paper using **Gemini embeddings + serverless functions**, increasing average session time by **~40%**. Open- source with growing active users continuously.

Early Stage Nail Image Disease Detection System

[[Link](#) | [Code](#) | [Demo](#)]

- Early Disease Detection via Nail Image – AI-Driven Web App [Live]
- Built and deployed a full-stack diagnostic tool (Next.js + FastAPI + CNN) hosted on Render, delivering <2s inference latency with 99.9% uptime during testing.
- Designed REST API endpoints for real-time prediction, and integrated structured logging + alerting pipeline.

Text-Aware Image Processor – 70% Cost-Reduction OCR Pipeline

[[Code](#)]

- Built a text-first OCR pipeline using **YOLOv8 + Tesseract**, **optimized for AWS Lambda deployment at <500ms/image**.
- **Reduced compute costs by 70% via selective region processing**, and prepared the backend for API-based scaling with CI/CD.
- Deployed CI-tested AWS apps using Docker & NGINX; integrated GitHub Actions for automated testing & logging in EC2-based pipelines.

Raba – Serverless URL Shortener on AWS

[[Link](#) | [Code](#)]

- Built and deployed a production-ready URL shortener serving 200+ requests/month using AWS Lambda, API Gateway, DynamoDB, and S3 for static hosting.
 - Used DynamoDB for low-latency key-based lookups and integrated IAM-based security, reducing unauthorized access by 100%.
 - Implemented RESTful API tests and error logging pipeline using Postman and Python, with automated test cases covering edge-case flows and CI triggers.
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SKILLS

- **Cloud & DevOps:** GCP (Cloud Run, App Engine, GCP Console), AWS (Lambda, EC2, API Gateway, S3), Docker, Kubernetes, NGINX, CI/CD (GitHub Actions, Jenkins), Terraform (beginner)
 - **Programming & Systems:** Python, JavaScript, Java, TypeScript, C++, Bash, Next.js, Tailwind CSS, Linux/Unix (CLI), TCP/IP, server-side scripting
 - **Databases & Testing:** SQL (PostgreSQL), NoSQL (DynamoDB, Supabase), Postman, Selenium, TestNG, Cucumber, REST Client, JSON/XML validation
 - **Concepts & Architecture:** Object-Oriented Design, Microservices, RESTful APIs, Data Structures & Algorithms (Trees, Graphs, Dynamic Programming), System Design (Scalable architectures, Load balancing, Caching)
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CERTIFICATIONS / Badges

- **AI Certification**, Smartbridge x Google [[Link](#)]
- **Google Cloud Skills Boost Badges** (3+ badges) and **IBM Skill Build Badges** (2+ badges) [[Google Badges](#)] [[IBM Badges](#)]