

Garvit Nag

+91-9877926632 | garvit1505@gmail.com | www.linkedin.com/in/garvit-nag | www.garvitnag.in

EDUCATION

Chandigarh College Of Engineering & Technology (Panjab University)

Bachelor of Engineering in Computer Science & Engineering, CGPA: 8.04

Chandigarh, IN

Dec. 2021 – June 2025

ACHIEVEMENTS

Gen AI Exchange Hackathon by Google

October 2024

Winner (Network 18 Track)

- Won first place in the Network 18 track at the Gen AI Exchange Hackathon organized by Google and Devfolio.
- Developed an innovative solution to combat misinformation in video content by engineering a robust media attribution and tampering detection system.
- See project: verifiedbycredify.vercel.app

Smart India Hackathon (SIH)

September 2024

Internal Winner - AICTE Problem Statement (ID: 1728)

- Proposed and designed a paperless scholarship disbursement system for the Prime Minister's Special Scholarship Scheme (PMSSS), automating validation to ensure transparent fund allocation.
- Collaborated within a cross-functional team to architect the solution, optimizing system performance and addressing real-time verification bottlenecks.
- See project: pramanik.vercel.app

PROJECTS

Qodex | Next.js 15, FastAPI, PostgreSQL, Pinecone | [Live Demo](#)

Oct. 2025 – Jan. 2026

- Engineered an AI-powered RAG system using **Google Gemini** to enable natural language querying of GitHub repositories.
- Optimized ingestion latency per repository by implementing local **vectorization** models within a FastAPI backend.
- Deployed the backend architecture as a containerized **Docker** application on **Hugging Face Spaces** for scalable inference.
- Managed high-dimensional vector embeddings via **Pinecone** and persistent relational data via **PostgreSQL**, secured with Appwrite OAuth.

MediSage | Next.js, FastAPI, MongoDB, Stripe, Redis | [Live Demo](#)

Dec. 2024 – Feb. 2025

- Architected a SaaS health platform integrating **Stripe** webhooks for handling tiered subscriptions and **Clerk** for auth management.
- Engineered a custom rate-limiting middleware using **Upstash Redis** to prevent API abuse and optimize backend throughput.
- Implemented an interactive 2D anatomical mapping interface to precisely capture symptom localization.
- Enforced strict data validation using **Pydantic** schemas, ensuring type-safe JSON communication between the client and server.

RecipeRover | Next.js, TypeScript, Flask, Appwrite | [Live Demo](#)

Sept. 2024 – Nov. 2024

- Developed a content-based recommendation engine in **Flask**, utilizing filtering algorithms to personalize recommendations.
- Engineered multi-modal search functionality, allowing users to query the database via text, structured forms, or image inputs.
- Leveraged **Appwrite** as a Backend-as-a-Service to handle secure user authentication and real-time data storage.
- Optimized **MongoDB** aggregation pipelines to efficiently index and retrieve recipe data across large collections.

TECHNICAL SKILLS

Languages: Python, JavaScript/TypeScript, C/C++

Frameworks & Libraries: FastAPI, Flask, Next.js

Databases: MongoDB, PostgreSQL, Pinecone, Appwrite

Cloud & DevOps: AWS, Docker

Developer Tools: Git/GitHub, VS Code, Linux/Unix