Ranjeet Kulkarni

ranjeetkulkarni2505@gmail.com · +91-9673839208 · GitHub · LinkedIn · [Portfolio Website](#)

EDUCATION

B.Tech. in Information Technology, IIIT Allahabad   **Grade:** 8.75   Aug 2023–Present
- **Coursework:** Data Structures & Algorithms **(10/10)** · Object-Oriented Programming **(10/10)** · Operating Systems **(10/10)** · Database Systems (SQL) **(9/10)** · Computer Networks **(9/10)** · Probability · Linear Algebra **(9/10)** · Discrete Math

TECHNICAL SKILLS

- **Programming Languages:** C/C++, Python, JavaScript (ES6+), Java, SQL
- **Web & API Development:** Flask, FastAPI, Node.js; RESTful API design; HTML5, CSS3, JavaScript
- **Databases & Storage:** PostgreSQL (Supabase), MySQL, MongoDB, Neo4j; SQLAlchemy ORM
- **Machine Learning & Data:** scikit-learn, TensorFlow, PyTorch, pandas, FAISS; Anaconda Navigator; embeddings, CNNs, NLP
- **Generative AI & Tooling:** LangChain, HuggingFace Transformers, GANs
- **DevOps & Collaboration:** Git, GitHub, Docker, CI/CD (Render, Vercel), Postman, Figma

PROJECTS

1. Knowledge-Graph-Backed Clinical Trial Recommender   *Backend | View K.G.*
- **Problem:** Semantic grouping & retrieval of 450000+ unstructured clinical studies for strategic insights.
- **Action:** Performed NER with PubMedBERT; embedded records using Stella 1.5B; applied FAISS for deduplication (cosine 0.857); built a Neo4j GDS knowledge graph and learned trans2vec embeddings for vector-based similarity search.
- **Impact:** Reduced duplicates by 25% and served top-10 explainable trial suggestions in < 2s via Flask APIs;

Tech Stack: Python · PubMedBERT · Stella 1.5B · FAISS · Neo4j GDS · trans2vec · Flask (REST APIs) · React.js · Gemini API

2. Adermis AI (Real-Time Skin Diagnosis) — Google Solutions Challenge   *Backend | Demo Video*
- **Problem:** Early detection & triage of skin conditions for under-resourced communities, with women's health Q&A.
- **Action:** Developed Flask backend serving a PyTorch CNN (p95 150ms); added remedy-recommendation microservice; integrated WebRTC consult & geo-referrals.
- **Impact:** Delivered sub-200ms classification at 92% accuracy; live consult via Flask-SocketIO (WebRTC)—exposed through a Next.js frontend.

Tech Stack: Python · Flask · PyTorch · TensorFlow · Flask-SocketIO · Google Maps API · Next.js · TypeScript

3. Campus-Hub 2.0 – DBMS Project   *Backend | Live Site*
- **Spearheaded** full-stack development of Campus-Hub2.0; containerized Flask application using SQLAlchemy ORM, Supabase PostgreSQL & Storage, and Dockerized Render CI/CD; enforced role-based auth (Werkzeug hashing, Flask-Mail/email verification, Flask-Session), CSRF protection, and centralized secret management.
- **Engineered** modular Lost & Found and Marketplace services with RESTful Jinja2/JSON APIs, Supabase image pipeline (on-the-fly resizing & compression <200ms), user feedback/comments, and admin moderation tools with 90%+ user satisfaction.

Tech Stack: Python · Flask · SQLAlchemy · Docker · Render CI/CD · Supabase (PostgreSQL & Storage) · Flask-Mail · Flask-Session · Pillow · Jinja2 · HTML5 · CSS3 · JavaScript

ACHIEVEMENTS

- JEE Advanced 2023: AIR 6461 · JEE Main 2023: AIR 3660 · NTSE (Rank 126)
- *Codeforces*: Peak rating 1427 (Specialist) · Solved 250+ problems · Global Rank 1171/32000+ Round 1027 (Div3)
- *CodeChef*: Peak rating 1722 (3 STAR) · Global Rank 459 (Starters 169) · Global Rank 259 (Starters 170)
- *LeetCode*: Knight (Peak 1853) · 400+ problems solved · Global Rank: 356/27K (Weekly 435), 1487/34K (Biweekly 152)
- *Novartis NEST Hackathon*: All-India Semi-Finalist (Top 42 Teams / 32000+ participants)
- Goldman Sachs India Hackathon 2025 (CS Track): AIR 390 out of 1600+ students from top 32 colleges
- *Google Student Launchpad 2025*: Selected for Google's flagship upskilling initiative
- **900+** problems completed across multiple coding platforms (codolio.com/ranjeet25)

LEADERSHIP & TECHNICAL EXPERIENCE

AI/ML Wing Member, Google Developer Group (GDG), IIIT-A   *Oct 2024 – Sep 2025*
- Delivered two 2-hour workshops (50+ attendees) on end-to-end ML pipelines—covering data ingestion, CNN training (PyTorch), and REST API deployment (Flask). Contributed to OpenCode'24 (IIIT Allahabad)
- Built a RASA chatbot with SQLite; implemented a FAISS-based RAG chatbot; developed a sketch-to-image *GAN Model* · 🎙 ▶