RANJEET KULKARNI

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ACHIEVEMENTS

Academic Excellence: Secured top ranks in competitive exams—JEE Main 2023 (AIR 3660), JEE Advanced 2023 (AIR 6461), NTSE Scholarship Rank 126.

Coding Profile:

- Codeforces PUPIL: Max rank #2860 in Div 1+2. [Profile]
- **CodeChef:** Max rating: 1897 (**4-STAR**). Achieved Global Ranks: #239 (STARTERS 173), #64 (STARTERS 172). [Profile]
- **LeetCode:** Max rating: 1853 (**KNIGHT**); 300+ problems solved. Achieved Global Ranks: 1487 [Biweekly Contest 152],2609 [Biweekly Contest 150], 356 [Weekly Contest 435] [Profile]

Hackathons and Open Source Contributions:

- Novartis NEST Hackathon: All-India Semi-Finalist; ranked among Top 42 National Teams (32k+ participants). [LINK]
- Createch Hackathon & UNSTOP Talent Park & Naukri Engineers Ring of Honour: Advanced through competitive preliminaries.
- **Opencode24:** Contributed to the college's flagship open-source event. [LINK]

TECHNICAL SKILLS

AI/ML & Data Science

- **Core Concepts:** Supervised/Unsupervised Learning, NLP, Neural Networks, Computer Vision, Generative Adversarial Networks, Generative AI, LLMs, Knowledge Graphs
- Frameworks & Tools: TensorFlow, PyTorch, Flask, RASA, FAISS, Neo4j, Twilio WhatsApp API

Software Development

- Web Development: React.js, Next.js, Node.js, Express.js, Flask, REST APIs
- **Programming:** Java, C/C++, Data Structures & Algorithms, Competitive Programming

Programming Languages & Tools

- Languages: Python, JavaScript (ES6+), SQL, HTML5/CSS3
- Tools: Git, GitHub, Vite.js, Postman

LEADERSHIP

GOOGLE DEVELOPER GROUP, IIITA

Oct 2024 – Present

- Led **AI/ML workshops** for 50+ students, focusing on hands-on training in advanced technologies.
- Directed impactful **Google Solutions Challenge** projects, creating real-world AI solutions.
- Co-engineered **Adermis**, an AI-powered skin disease diagnosis and severity assessment platform.

CERTIFICATIONS & PORTFOLIO

Artificial Intelligence and Machine Learning – *EICT IIT Kanpur* [LINK]

Project Completion Certificate – EICT IIT Kanpur [LINK]

Portfolio Website - ranjeet-kulkarni-portfolio

EDUCATION

B.Tech. in Information Technology

IIIT Allahabad

2023 - Present♀ Prayagraj, UPCGPA (till 4th Sem): 8.66

Coursework: Data Structures and Algorithms, Object-Oriented Programming, Operating Systems, Computer Organization and Architecture, Database Management Systems (DBMS), Computer Networks, Probability and Statistics, Linear Algebra, Discrete Mathematics.

PROJECTS

N.E.S.T : AI-Driven Clinical Trials Recommender System O GitHub Repo [View K.G.]

- Engineered a scalable AI pipeline to semantically group and retrieve clinical trial data (450k records, 495 MB of Textual Bio-Medical Data) by merging multi-source textual data and extracting structured relationships via Gemma 2;
- Optimized node deduplication using **Stella 1.5B embeddings** and **FAISS** (0.8 threshold, avg cosine similarity 0.857) while architecting a **Neo4j knowledge graph**.
- Implemented a graph-based recommendation engine with Neo4j GDS (**Jaccard similarity**) to deliver top-10 trial recommendations—ensuring cost efficiency, clinical relevance, and explainability.

Adermis AI – Skin Diagnosis & Women's Healthcare Platform [Visit Here] • GitHub Repo

- Developed a web app leveraging **CNNs (PyTorch, TensorFlow)** for real-time skin condition analysis with severity detection.
- Integrated remedy recommendations (Ayurvedic, home, non-prescription) and geolocation-based referrals to clinics (NGOs, government, private).
- Enhanced women's health support through a dedicated chatbot and live video consultations.

Tech Stack: CNN, PyTorch, TensorFlow, OpenCV, FAISS, Flask, Flask-SocketIO, Node.js, NEXT.js, TypeScript, Vercel, Render, Gemini API, Google Maps API, WebRTC

- Built an interactive web application using GANs for real-time sketch-to-color transformation, delivering a seamless user experience.
- Trained a custom GAN model on an anime dataset to generate high-quality colorized outputs with reduced latency.

Tech Stack: GANs, Flask, HTML5, CSS3, JavaScript, Anime Sketch Colorization Pair dataset.