KRISHNA KIREETI SAMANTHAPUDI

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Portfolio | GitHub | Linkedin | LeetCode

EDUCATION

Institute of Aeronautical Engineering　　　　　　　　　　　　　　　　Hyderabad, India
Computer Science and Engineering B.Tech　　　　　　　　　　　　　August 2023 - August 2027

EXPERIENCE

Energetic Info Solutions | Software Intern　　　T-Hub , Knowledge City rd, Hyderabad | May 2024 - June 2024
- Worked on a **Retrieval-Augmented Generation (RAG)** model for **UTI diagnostics** to improve response accuracy.
- Implemented **vector search algorithms** for efficient retrieval from large-scale **medical datasets**.
- Used **MongoDB** and **Python** to manage **structured and unstructured healthcare data**.

Central Institute of Tool Design | AI Intern　　　　　Balanagar, Hyderabad | May 2025 - May 2025
- Worked on an **image classification model** to detect faults in **solar panels** (e.g., dust, snow coverage).
- Preprocessed image datasets and trained models to classify panel conditions based on **output efficiency**.
- Used **Python**, **TensorFlow**, and **OpenCV** for model development and image processing.

SKILLS

Programming Languages:	java, python, dart, JavaScript, HTML, CSS
Libraries/Frameworks:	react, django, TensorFlow, OpenCV
Tools / Platforms:	vscode, Git
Databases:	MySql, MongoDB

PROJECTS / OPEN-SOURCE

healthcare-information-system | Link　　　　　　　　*JavaScript, Python, CSS, HTML, Batchfile*
- Built a full-stack **Healthcare Information System** for disease diagnosis, medication suggestion, and patient history tracking.
- Integrated **ML-based diagnosis, self-learning AI**, and a secure **patient-medication database** using **Django**, **React**, **SQLite**, and **scikit-learn**.

Flute_player | Link　　　　　　　　　　　　　　　　　　　　　　　　　　*Python*
- Created a **virtual flute player** controlled via **real-time hand gestures** using a webcam.
- Used **OpenCV**, **MediaPipe**, and **Pygame** to detect finger positions and map gestures to musical notes with visual and audio feedback.

EV-Charging | Link　　　　　　　　　　　　　　　　　　　　　　*Python, HTML, CSS*
- Developed a smart **EV charging reservation system** with **slot booking**, **AI-powered demand prediction**, **carpooling**, and **email notifications**.
- Built using **Django**, **REST Framework**, **HTML/CSS/JS**, and **MySQL**, with real-time updates and a responsive user dashboard.

CERTIFICATIONS

- Problem Solving (Intermediate) - **HackerRank**
- Software Engineer - **HackerRank**
- The Complete Full-Stack Web Development - **Udemy**

HONORS & AWARDS

- Meta Hacker Cup 2025 Advanced to Round 2 (Global ranking ~1,200)
- LeetCode Knight Badge Top 5% of global participants