KARNATAKAM RISHI KIRAN

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EXPERIENCE

AKSI AI AEROSPACE AGRI TECHNOLOGY VENTURES PVT LTD Jan 2025 – Jul 2025
Python Engineer *Hyderabad*

- Engineered an automated defect detection system for wind turbines using drone imagery, achieving over 95% accuracy in identifying structural faults.
- Implemented Mask R-CNN for precise object segmentation, which automated the analysis of thousands of images and reduced manual inspection time by 60%.
- Streamlined the model inference pipeline for real-time analysis, improving system reliability and enabling a 25% faster turnaround for predictive maintenance reports.

EDUCATION

NNRESGI Dec 2021 – Jun 2025
Bachelor of Technology, Computer Science and Engineering

- GPA: 8.4/10.0

PROJECTS

AI-Powered Resume Builder *craftairesume.netlify.app* May 2025 – Nov 2025
Technologies: *Supabase, Gemini API, Python, GCP*

- Built an AI-powered resume builder serving 250+ users, using Google Gemini API to improve resume content and increase ATS compatibility by over 20%.
- Architected a full-stack application with Supabase and GCP, achieving 99.9% uptime and reducing document creation time by 40%.

AI-Integrated Plant Disease Detection Mobile App Apr 2025 – May 2025
Technologies: *Flutter, TensorFlow Lite, MongoDB*

- Developed a mobile app for real-time disease detection, achieving 95%+ accuracy using an optimized TensorFlow Lite model.
- Optimized on-device inference with a 2-second response time and managed 500+ diagnostic records using MongoDB Atlas for data persistence.

AI-Powered Chess Engine Aug 2024 – Sep 2024
Technologies: *Python, Minimax Algorithm*

- Programmed an AI chess engine with minimax and alpha-beta pruning, boosting move generation speed by 30%.
- Enhanced strategic depth by 20% and developed an intuitive Tkinter GUI, leading to a better user gameplay experience.

Cotton Plant Disease Detection Feb 2024 – Mar 2024
Technologies: *Python, TensorFlow, CNN*

- Designed a CNN model using transfer learning to classify cotton leaf diseases, achieving 90%+ accuracy and outperforming baseline models by 25%.
- Processed and augmented a dataset of over 10,000 images to enhance model generalization and ensure reliability in field deployments.

SKILLS

- **AI/ML Deep Learning:** Computer Vision, Deep Learning, LLMs, RAG, Object Detection (YOLO, R-CNN), NLP, TensorFlow, PyTorch
- **Programming Languages:** Python, C, SQL
- **Cloud Platforms:** AWS (EC2, S3), Google Cloud Platform (GCP), Netlify
- **Databases:** Supabase, MongoDB, MySQL
- **Tools Version Control:** Git, GitHub, Docker, Cursor AI

AWARDS

National Hackathon on Generative AI Sep 2024

· Secured 2nd Place in a National Level Hackathon focused on Generative AI solutions.

Internal Hackathon on Generative AI Aug 2024

· Achieved 3rd Place in a college-hosted Hackathon focused on Generative AI innovation.

CERTIFICATIONS

Python For Data Science, IIT Madras (NPTEL) Jan 2025

AWS Academy Cloud Architecting, AWS Academy Sep 2024

Supervised Machine Learning: Regression and Classification, Stanford Online (Coursera) Jun 2023