RAHUL A GOWDA

+91 8217691992 • rahulgowda277@gmail.com • linkedin.com/in/rahulagowda • github.com/Rahulagowda004

PROFESSIONAL EXPERIENCE

URSC (ISRO), Bangalore, India: Project Trainee Mar. 2025 – Present

- Built Generative Gyaan AI applications (e.g., coder, meeting assistant) for internal use by URSC staff.
- Developed a CNN model and applied Explainable AI techniques using SHAP for interpretability and research.
- Designed a multi-agent workflow for research assessment and built a custom LightRAG-powered chatbot.

AI-Zira Technologies, Remote: AI Engineer Intern Oct. 2024 – Mar. 2025

- Built and dockerized 10 specialized chatbots using LangChain and LangGraph, including tools like email writers, medical assistants, and text summarizers.
- Fine-tuned LLMs and designed modular generative AI systems tailored for diverse NLP tasks and real-world applications.
- Delivered scalable, production-ready generative AI pipelines and LangGraph-powered agentic frameworks.

Aspire Technologies, Bangalore, India: AI Business Intelligence Intern Sept. 2024 – Mar. 2025

- Designed AI-driven applied ML models to identify trends and enhance reporting.
- Improved analytics accuracy and streamlined operations to generate actionable business insights.

Unifirst Robotics, Bangalore, India: Machine Learning Engineer Intern Oct. 2023 – Nov. 2023

- Built ML and DL models from scratch, focusing on data preprocessing, feature engineering, and optimization.
- Enhanced model performance using advanced neural network techniques for improved predictions.

ACADEMIC PROJECTS

Real-Time Route Optimization | Python, Machine Learning, EDA, Flask, React, TypeScript 2025

Developed a real-time route optimization system with a Flask backend and React frontend. Implemented machine learning models to predict delivery time with an R^2 score of 0.90. Optimized routes dynamically based on traffic

- Enabled upload/download of raw and vectorized datasets with library-based access and community support.
- Integrated a chatbot for prompt engineering, allowing users to generate, share, and reuse system messages.
- Tech stack: React, FastAPI, Azure Blob, Docker, LangChain.

Phishing Link and Message Detection Browser Extension 2024

Built a phishing detection browser extension using a BERT-based model and integrated web stack.

- Developed extension with HTML, CSS, JavaScript, and Flask.
- Used fine-tuned BERT for URL classification with Transformers and PyTorch.
- Flask-CORS for communication and version control.

Additional projects showcasing diverse skills are available on my GitHub profile.

TECHNICAL SKILLS

Programming Languages: Python, Java, C

Tools & Frameworks: Scikit-Learn, TensorFlow, Hugging Face, OpenCV, PyTorch, Docker, FastAPI, Flask

Machine Learning & Deep Learning: End-to-End Model Development, Neural Network Design, Model Optimization & Deployment for Scalable Solutions

Generative AI: Prompt Engineering, LangChain, Huggingface, LangGraph, crewAI, Phidata, LangChain, LangSmith, NLP, Vector Databases, Graph Databases, RAG, azure, SQL, Fine-Tuning LLM, Natural Language Processing

ACTIVITIES & ACHIEVEMENTS

Hackathon Competitions 2023 – 2025

Demonstrated leadership and innovation across multiple hackathons

- Led the team to victory in VIT Hackathon, showcasing problem-solving and technical skills.
- Won Hackmania and Securathon, excelling in software innovation and cybersecurity.
- Participated in several other hackathons, sharpening rapid prototyping and AI integration abilities.

EDUCATION

Bachelor of Engineering in Artificial Intelligence, Vemana Institute of Technology

Bengaluru, Karnataka