

HEMANTH RAMESH

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OPEN FOR FULL-TIME ROLES FROM APRIL 2024—READY TO MAKE AN IMPACT!

“Culture aligned **Data Scientist** dedicated to developing and deploying scalable, end-to-end solutions with large datasets, optimizing data pipelines, predictive modeling, and communicating findings to a diverse array of stakeholders.”

SKILLS & EXPERTISE

Languages/Frameworks: Python (Pandas, Numpy, Sklearn, PySpark, Pytorch, TensorFlow, NLTK, Langchain), SQL, Linux, R
Techniques: Machine Learning (Supervised, Unsupervised, Ensemble Learning), Model Interpretability, CI/CD, MLOps, NLP
Technologies: ML Flow/DVC, AWS, GCP, Docker, Git, Github Actions, Tableau, Kubernetes, Terraform, REST
Generative AI: Open-source and paid LLM models, LlamaIndex, Vector Databases
Data Engineering: ETL/ELT, MySQL, NoSQL, Snowflake, Airflow, Spark, Kafka
Soft Skills: Self-starter, Quick-learner, Analytical Thinking, Teamwork, Effective communication, Value Alignment

PROFESSIONAL EXPERIENCE

Data Scientist Intern | Celstream Technologies, Bangalore, India Jan - Aug 2022

Tech-Stack: Python, ML System, Recommendation engine, AWS service, Docker, Flask, Data Analysis, Linux, Jira

- Centralized **ML** and **AI** tasks across **AWS** environment using Dataiku DSS, boosted data pre-processing efficiency by 15%
- Conceptualized and implemented a robust **end-to-end ML pipeline (Docker, Flask, AWS Sagemaker)**, accelerating digital transformation and saving **\$30,000** in operational costs for Enterprise AI clients
- Tackled application performance, log management, **production issues** through **Linux scripting**, testing & debugging

Research Scientist | R3 Media Labs, Kanpur, India

Jun - Aug 2021

Tech-Stack: Python, Classification models, MS SQL Server, MongoDB

- Deployed a **Predictive analytics model** for **Customer Churn** boosting customer retention of mookIT Platform by 15%
- Strategically analyzed 100GB of structured & unstructured **click-stream data** to enable targeted retention strategies
- Enhanced platform revenue by **\$10,000** and user engagement by **12%** through strategic Python-based **A/B tests**

Graduate Student Mentor and Cricket Academy | Northeastern University

Present 2024

- Mentored **10+ graduate master students**, enhancing their academic and research skills, which led to a **35% rise** in thesis completions, improved co-op placements and led the team to victory in **Nationals** (Texas) and **Regionals** (MA)

KEY PROJECT

LLM: Intelligent RAG - Gemma Chatbot

Gemma 7B LLM, BAAI/bge-large-en, Langchain, ChromaDB, Gradio

- Automated a chatbot enabling dynamic PDF and document processing with offline and real-time capabilities
- Enhanced user experience with gradio UI for easy document integration, enabling access to retrieved content and PDFs

NLP: Generating and scoring toxic comments

Python, NLTK, Transformers

- Orchestrated dual-model strategy, using **BERT** and **miniGPT**, achieving 85.44% accuracy and 55% reduction in model loss
- Validated assessments of 14 unique models, achieving categorical cross-entropy loss values within 0.27 to 0.35

Machine Learning: End-to-End Regression model

Regressors, Flask, Azure, AWS, Docker, CI/CD, Git Actions

- Engineered a **production-grade ML model** employing column transfer pipeline, with 95.3% accuracy through R2 score
- Launched application on **AWS Beanstalk**, **Azure Web App**, by **CI/CD** pipelines via GitHub Actions with container registries

MLOps: Credit Card Fault Detection

Python, DVC, MLflow, Airflow, GCP

- Computed a real-time MLOps system, integrating **Airflow**-managed data pipelines with **DVC** and **GCP** storage
- Administered model tracking with **MLflow**, ELK for logging, Flask API for user interaction and automated retraining

EDUCATION

Northeastern University (Boston, MA) | **Master of Science** in **Data Science**

April 2024

Courses: Probability and Statistics, NLP, Database Design, Data Mining, Neural Networks, ST: LLMs, Project Management

PES University (Bangalore, India) | Bachelor of Engineering in **Electronics and Communication**

June 2022