GAYATRI SHRINIVAS BALLARI

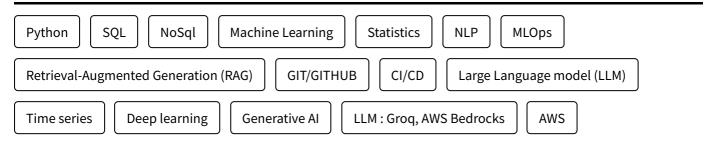
Data Scientist

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Profile

Experienced Data Scientist specializing in developing and managing enterprise-scale models, analysing over 1 million data points, and enhancing efficiency through scalable solutions. Proven ability to improve customer satisfaction and reduce operational costs through data-driven insights.

Skills



Professional Experience

Data scientist, *Acies Global* ☑ **QA Chatbot**

Jul 2024 – present Bangalore, India

- Extracted data from S3 bucket, utilizing HNSW indexing for efficient verification
- Transitioned to Neo4j knowledge graph, processing user queries with LLM model
- Pioneered customer segmentation strategy identifying high-risk policyholders, leading to a 12% reduction in attrition within those segments and improving overall customer lifetime value by 8%.
- Leveraged **Amazon Bedrock** foundation models with prompt engineering to extract company names from user inputs, **achieving 95% accuracy across 10,000+ queries**.
- Performed a **Python unit test suite covering 90%** of script logic, reducing production bugs by **40%** and improving release confidence.

Data Scientist, T-systems ICT India Pvt. Ltd, Bengaluru

- Partnered with cross-functional teams to develop predictive models for router reboot prediction, enhancing network performance by 27% and optimizing performance for 45,000+ devices.
- **Enhanced data workflows** by automating processes and implementing optimizations, achieving a **90% boost** in processing **efficiency.**
- Optimized **Telemetry dashboard**, reducing query load by 40% and improving runtime by 30%.
- Defined KPIs in a **Memory Evaluation Matrix for CPE** memory tracking, improving tracking precision by **40%** and enabling faster decision-making in resource allocation.
- Developed a model to predict high-value customers for mesh product sales, boosting conversion rates by **20%** and reducing cold calls by **40%**.
- Designed a Q&A chatbot using a RAG system with Llama3 to convert natural language queries into SQL, reducing query generation time by 70% and enabling non-technical users to access data insights.
- Automation and process optimization improved customer satisfaction by 35% and decreased agent workload by 50%.
- Engineered a context-aware chatbot by integrating databases with vector embeddings, improving answer accuracy by 40% and reducing manual support queries by 60%.

Data science trainee, Besant technologies

- Incorporated advanced data models and algorithms
- Enhanced product development precision by 40%

Dec 2022 – May 2024 Bengaluru, India

May 2022 – Jul 2022 Bengaluru, India

Smart Chat for Health Insurance

 Analyzed organizational data to derive insights into information retrieval, HR workload, and policy engagement, leading to a 30% reduction in HR response time and a 25% increase in policy awareness..

Publications

AN EXPLAINABLE-AI BASED SKIN DISEASE DETECTION, Gayatri Ballari

Nov 2022

- **Project Aim**: Utilize **deep learning/machine learning techniques** for the machine-driven identification of skin illnesses.
- ResNet18 Model: Achieves a classification accuracy of 96%.
- Grad-CAM: Enhances model explainability for dermatologists.
- Literature Survey: Examines deep-learning research on skin disease diagnosis using structural photos.

Projects

Insurance Healthcare Agent System

- Customized and fine-tuned open-source and commercial LLMs, improving task-specific accuracy by up to 35% and reducing inference costs by 25%.
- Facilitated seamless handling of 10,000+ monthly queries, maintaining 95% response accuracy.
- Boosted customer engagement by 35% and reduced claims costs through a personalized recommendation engine, leading to a 15% increase in customer satisfaction.

Telemetry and Reboot

- Implemented models to analyze customer attrition, resulting in a 6 basis point increase in monthly retention.
- Utilized **data visualization** tools to effectively communicate complex data insights, enabling agents to make informed decisions and improve **50% overall sales performance**.

Certificates

• Google Data Analytics by Google

• Deep learning by Deep learning.Al

 Python for Data Science, AI & Development ☑

Education

M.Tech in Computer Science, KLE Technological University

Hubli, India

B.E in Computer Science, Government Engineering College

Haveri, India