Harshith Narasimhamurthy

Data Scientist

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Bangalore, India | LinkedIn Profile | Github | Research Papers

Professional Summary

AI enabled Data Scientist with **3 years of experience** building and deploying **production-grade, cloud-native analytics and ML solutions** across finance, agriculture, and enterprise analytics. Proven expertise in **geospatial intelligence, time-series modeling, and advanced SQL analytics**, with hands-on ownership from problem framing to stakeholder adoption. Strong track record of driving **measurable business impact** through predictive modeling, automation, and scalable data pipelines.

Professional Experience

07/2023 – present
Bengaluru, India

Data Analyst
SatSure Analytics

- Owned and delivered production ML solutions supporting banking, insurance, and agribusiness use cases, translating complex geospatial and temporal data into high-impact business insights.
- Partnered with cross-functional teams to operationalize predictive and analytical models, enabling data-backed decision-making for expansion planning, risk assessment, and customer targeting.
- Applied statistical experimentation (A/B testing, hypothesis testing) and advanced SQL analytics (CTEs, window functions) to drive double-digit improvements in sales and operational efficiency.
- Designed and automated scalable ETL/ELT pipelines using Apache Airflow and Apache Iceberg on AWS, improving data reliability and reducing processing latency by ~25%.
- Recognized as Customer Champion for consistently delivering high-quality, impact-driven analytics solutions.

01/2023 – 03/2023
Sydney, Australia

Machine Learning Researcher
Western Sydney University

- Researched and implemented time-series forecasting models (LSTM, ARIMA) for crop yield prediction. Designed preprocessing and validation workflows, improving forecasting accuracy by ~12% while reducing manual analytical effort.

Data Science Projects

Bank Branch Expansion using Location Intelligence & Geospatial Analytics

- Objective: *To identify and predict high-potential, profitable locations for new bank branch*
- Approach: Performed deep exploratory data analysis (EDA) and advanced feature engineering on large-scale demographic and geospatial datasets to uncover high-impact signals influencing branch performance and customer demand. Designed, trained, and benchmarked multiple machine learning models leveraging K-Means for intelligent market segmentation and Random Forest & Linear Regression for branch profitability prediction supported by hyperparameter optimization.
- Impact: Delivered measurable business impact, achieving ~82% location selection accuracy, driving a ~35% reduction in operational costs, and significantly improving customer acquisition by strategically identifying and targeting high-potential, underserved regions.

Real-Time Crop Health Monitoring

- Objective: *Built a high-resolution* (10*m* × 10*m*) *crop health intelligence system using time series NDVI to objectively assess farm level crop conditions for risk assessment, insurance validation, and credit decisioning.*
- Approach: Applied statistical time-series analysis and K-Means clustering (unsupervised ML) on multi-temporal NDVI data to classify crop health into Good, Average, and Poor categories, enabling date-wise and season-wise health profiling at plot level.
- Impact: Achieved ~95% accuracy in identifying severely damaged crops, enabling faster insurance claim verification and risk mitigation; the solution was adopted by multiple banks and insurance providers for loan underwriting, yield assurance, and seasonal credit planning recognized as a high-impact, production-grade remote sensing product.

Cross Industry Business Intelligence Solutions Using SQL

- Objective: *To design a reusable, SQL-driven analytics repository that solves real-world business problems across multiple industries including Banking, Retail, Logistics, and Healthcare by transforming raw data into actionable insights.*
- Approach: Designed advanced, modular SQL solutions using Window Functions, CTEs, recursive queries, and domain-specific KPIs (e.g., customer segmentation, RFM, basket analysis, rush-hour detection, dormant account identification) to translate complex cross-industry business requirements into efficient analytical workflows.
- Impact: Delivered actionable insights across multiple business functions, improving operational efficiency and strategic decision-making while establishing a scalable SQL analytics framework adaptable to diverse business environments.

Skills

Programming:
Python, SQL

Data Manipulation & Visualization:
Pandas, NumPy, Matplotlib, Seaborn, Tableau

Machine Learning & Statistics:
Scikit-learn, Random Forest, Linear Regression, Clustering, A/B Testing, Hypothesis Testing

MLOps & Big Data Tools:
Apache Airflow, Apache Iceberg, AWS (S3, Athena, EC2), PostgreSQL

Education

2021 – 2023
Anand, Gujarat
M.Sc. Ag. Statistics | Gold Medalist
Anand Agricultural University

2017 – 2021
Bangalore
B.Sc. Agriculture | AIR-6
University of Agricultural Sciences

Awards & Recognition

Customer Champion - SatSure Analytics

Gold Medalist - M.Sc Statistics

License & Certifications

- Generative AI Course with Langchain and Huggingface
- Advance Python for DataScience
- HackerRank SQL Certification
- Foundations of Project Management

Publications on Deep Learning

Memory based neural network for cumin price forecasting in Gujarat, India

Recurrent neural network architecture for forecasting banana prices in Gujarat, India