Harish Kumar Sarathi

Dallas, Texas | +1 (945) 216 4304 | sharishkmr@gmail.com | www.linkedin.com/in/shk30/

"Eligible to work in the US for internships and full time for up to 36 months without sponsorship"

EDUCATION

University of Texas at Dallas, Texas — DEC 2025
Master of Science, Business Analytics and Artificial Intelligence — **GPA 3.58**
Dean's Excellence Scholarship

Vellore Institute of Technology, Vellore, India — MAY 2022
Bachelor of Technology, Electronics and Communication Engineering with
Specialization in Internet of Things and Sensors — **GPA 3.08**

SKILLS

Languages: Python, C, C++, R, SQL, Java
Analytics/ML: Scikit-learn, Pytorch, SPSS
Libraries/Frameworks: Pandas, NumPy, Scrapy, Matplotlib, ggplot2
Tools & Platforms: Tableau, Power BI, AWS(EC2, Lamda, S3, Redshift, QuickSight) Google Analytics, Jupyter Notebook, Anaconda, Microsoft Azure(Data Ingestion Pipeline, Spark, Purview, Streaming), Snowflake
Software: LabVIEW, R Studio, PyCharm, MS Office
Concepts: Forecasting, Problem-Solving, Experimentation, A/B Testing, Machine Learning (Basic), Analytical Skills, Data Visualization, Data Science, Logistic Regression, Random Forest, GBT, LDA, NBD, Poisson, Agile(Jira), Scrum.

PROFESSIONAL EXPERIENCE

Karthik Roller Flour Mills Private Limited, Vellore, Tamil Nadu, India. — AUG 2022 – JUL 2024
Supply Chain Associate

- Improved production efficiency by 27% in 4 months through quality control testing and Python-based automation, reducing errors by 2%.
- Developed automated quality tracking systems and built KPI dashboards using Excel and Tableau to monitor sales and supply chain performance, including deal size and margin trends.
- Supported demand forecasting and scenario testing, contributing to a 5.86% increase in profit margins.

Delta Electronics India Private Limited, Krishnagiri, Tamil Nadu, India. — MAR 2022 – JUL 2022
Intern as Engineer in Operations

- Developed new methodologies and analyzed 125 VFD's mechanical and electromechanical systems to improve business operations efficiently by 19%.
- Provided technical support for troubleshooting and performed over 150 hardware tests to maintain mechanical and electrical systems, resulting in a 12% improvement in operational efficiency and a 4.62% reduction in production costs.

PROJECTS & ACHIEVEMENTS

DataWhiz 2025, EnVision UTD – 2nd Place - Team Innovate Y Judges from SEG, Kimberly-Clark, and Capco — Mar 2025

- Analysed 23,000+ OSHA injury records using R-based NLP (LDA) and structured filtering to uncover patterns in manufacturing-related hand injuries.
- Built a logistic regression model to predict hospitalization risk and developed a Power BI dashboard with real-time insights.
- Technologies Used: R, data.table, topicmodels, dplyr, tidygeocoder, GLM, LDA, Power BI.

Modern Data Platform for Banco Wild West, Organizing for Business Analytics Platforms — FEB 2025 – MAY 2025

- Designed a scalable AWS Lakehouse Architecture supporting both OLTP and OLAP workloads with zoned S3 storage (Raw, Processed, Curated, Real-Time).
- Enabled real-time ingestion, ML training, and predictive analytics using Redshift, Glue, Kinesis, and Sage Maker, delivered collaboratively in Agile sprints, reducing data silos by 40%.
- Technologies Used: AWS (Redshift, SageMaker, Glue, Kinesis), IAM, Lake Formation, CloudTrail, Macie.

Customer Behavior Modeling, Modelling for Business Analytics — AUG 2024 – DEC 2024

- Built Poisson, NBD, and regression-based models in Python to predict customer purchases using real-world datasets (billboards, books, candy).
- Gathered functional requirements across teams, delivered real-time predictions and marketing insights using finite mixture models and Zero-Inflated NBD, enhancing personalization strategies.
- Technologies Used: Python, NumPy, SciPy, StatsModels, Matplotlib, MLE, AIC/BIC, LRT.

Grocery Recommendation System, Foundation of Programming — AUG 2024 – DEC 2024

- Developed an R-based grocery recommendation engine using transactional data and a custom GetRecommendation() function for co-purchase prediction.
- Achieved 69% accuracy using a custom scoring model (3-2-1 point scale) with robust data transformation, testing, and validation workflows.
- Technologies Used: R, dplyr, tidyr, ggplot2, Custom Scoring Logic, Data Pivoting.

VOLUNTEER EXPERIENCE

AIESEC, Mauritius — DEC 2019 – JAN 2020

- Contributed to the advancement of one of the United Nations' sustainable development goals, positively impacting the environment.
- Developed leadership skill by volunteering to the sustainable development team and experienced new cultures and learned about their traditions.