SWARGAM SANTHOSH
Senior Data Scientist

☎ **+1 (647)-970-1655**   ✉ **santhosh.swargam87@gmail.com**   📍 **Toronto, Canada**

Professional Summary

Senior Data Scientist with over 8 years of experience in harnessing data analytics and machine learning to drive business performance and optimization. Demonstrates expertise in deploying advanced Data science models, streamlining data processes, and delivering scalable solutions. Renowned for strategic acumen, precision, and a dedication to leveraging data for impactful outcomes. Proven success in leading projects for leading organizations across the insurance, retail, and quick service restaurant sectors in the US and India. Key strengths include Data Science, Predictive Analytics, NLP, Statistical Modeling, Machine Learning, Process Improvement, and Agile Practices.

Technical Skills

- **Skills:**   Machine Learning, Statistical analysis, Natural Language Processing, Generative AI, Optimization, Production ML. Hypothesis testing
- **Tech Stack:**   GitHub, Gurobi, AWS, Snowflake, Hive, Oracle, Data Bricks, Azure, GCP
- **Programming:** Python, SQL, Keras, R, PyTorch, Lang chain, Pyspark, Mlflow

Professional Experience

Tiger Analytics, Toronto Canada
Senior Data Scientist   *(April 2023 - Present)*
- Engineered a dealer-trim level DTS prediction model leveraging sales, inventory and market data to optimize vehicle to dealer allocation to 160+ dealerships, **boosting market share by 1%** and cutting **dealer trades by 35%**, all while adhering to stringent business and inventory constraints. Also Implemented a value tracking framework to monitor performance impact over time.

- Designed and deployed a recommendation engine for optimal Local Installed Options(LIO) configurations per model-dealer pairing, balancing minimum impact on predicted DTS and maximum revenue uplift, resulting in smarter vehicle customization aligned with dealership demand and margin objectives.

- Deployed an NLP model to analyze claim text data, enabling claim handlers to improve the accuracy and quality of their referrals to the Special Investigation Unit (SIU).

- Implemented a user-friendly interface utilizing the pre-trained **RoBERTa model** from Hugging Face, allowing business stakeholders to assess sentiment and swiftly adjust their communication based on the insights obtained.

- Employed topic modeling to analyze customer survey data for a prominent US-based insurance company, uncovering major themes and relevant keywords, and correlating them with satisfaction scores to gauge feedback trends at scale.

Jio Platforms Limited, Hyderabad India

Manager, Data Science *(April 2022 – March 2023)*

- Optimized warehouse slotting recommendations for a B2B grocery enterprise to minimize picker travel distances, utilizing metrics derived from associations, congestion, and the frequency of all SKU units. **Reduced the picking tour by around 15%** and operationalised the model in the warehouse management systems.

- Recommended optimal safety stock for the warehouse inventory management through the statistical simulations Achieved an **increase in average service level by around 7%** in the warehouse using the existing working capital

Deputy Manager, Data Science *(June 2020 - March 2022)*

- Engineered a customer churn model for a B2B grocery business to forecast customer attrition based on historical transaction data. Used SHAP values to identify key churn indicators, facilitating targeted retention strategies. Attained **a 2.5x lift** with the model, enabling the business to more effectively allocate capital and reduce attrition.

Tiger Analytics, Chennai India

Data Scientist *(July 2019 - May 2020)*

- Orchestrated a team in designing workflows to consolidate model-ready data within a Hive server from OCR-extracted raw data of around **1 million scanned policies** for a US-based life insurance company.

- Streamlined the process through statistical analysis to automate the evaluation of data health and devised a prioritization model for manual corrections, thereby significantly enhancing data quality.

Senior Analyst *(July 2018 - June 2019)*

- Developed and implemented scalable forecasting models to estimate price elasticity for a major US-based quick service restaurant (QSR) chain, utilizing large-scale transactional data across multiple stores and product categories.

- Proposed data-driven, store-specific pricing strategies based on model insights, which were projected to increase **annual sales by approximately 3%**, enhancing profitability and competitiveness.

Analyst *(July 2017 - June 2018)*

- Designed a classification model to streamline the underwriting process for a leading US-based life insurance company, enabling a straight-through approach and **reducing mortality risk to under 4%.**

- Leveraged data from Attending Physician Summary (APS) records using various text embedding techniques to improve the prediction of an applicant's underwriting class.

Educational Background

Indian Institute of Science, Bengaluru, India *(January 2022 – February 2023)*

- PG level certification in Deep learning and its applications

Indian Institute of Technology, Madras, India *(June 2012 – July 2017)*

- Mechanical Engineering with specialization in Product Design