SURYA YOGANANTHAN

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EDUCATION

Master of Science in Business Analytics, *Northeastern University, Boston, MA*   **Dec 2025**
Relevant Coursework: Data Analysis, Data Wrangling, Database Management, Data Mining, Data Visualization
Bachelor of Technology in Mechanical Engineering, *Sastra Deemed University, Thanjavur, India*   **Aug 2023**

PROFESSIONAL EXPERIENCE

Business Analyst & Operations, *Bharat Petroleum Corporation Limited (Authorized Dealer) | TN, India*   **Dec 2023 - Present**
- Used market and sales data from 354 BPCL outlets across four districts (53,404 KL/month) to perform market analysis and benchmarking, helping validate a $108K greenfield investment and set realistic ramp-up targets
- Tracked post-launch sales and financial performance, supporting a turnaround from a $170 monthly loss to $1.8K profit within four months, resulting in 23.3% annual ROI, a 4.3-year payback, and performance well above break-even levels
- Built Excel-based KPI trackers and simple dashboards to monitor 120+ daily metrics across sales, inventory, and operations, contributing to 132% growth in monthly fuel volume and a 130% improvement in daily sales consistency
- Applied demand forecasting and inventory analysis to plan fuel orders and manage $96K in monthly supply, maintaining a 4-day inventory cycle, avoiding stockouts, and achieving 12.2% local market share in a competitive 9-station area

Graduate Teaching Assistant, *D'Amore-McKim School of Business | Boston, MA*   **Sep 2025 - Dec 2025**
- Guided 190+ graduate and undergraduate students by guiding hands-on work in SQL, Python, Excel, Alteryx, and Oracle SQL Developer, strengthening understanding of data wrangling, regression modeling, forecasting, and optimization
- Created and tested SQL scripts, Alteryx workflows, and Excel models for data validation and transformation, enabling end to end analytical workflows covering extraction, cleansing, integration, and aggregation for business cases

Operations Analyst Intern, *Mahindra & Mahindra Limited | Pollachi, India*   **Sep 2023 - Jun 2024**
- Planned and executed data driven experiments using Design of Experiments and Response Surface Methodology, evaluating 13 experimental conditions to analyze the impact of key process variables on production quality
- Built and validated regression models and conducted ANOVA on process data, achieving 97.33% R^2 accuracy in forecasting tensile strength and hardness while identifying key drivers of variability
- Optimized process parameters based on statistical findings, contributing to a 30% improvement in material strength while reducing rework and repeat testing costs and improving production consistency

ACADEMIC EXPERIENCE

Donor Propensity Modeling & Strategic Segmentation, *NU Philanthropy*   **Dec 2025**
- Developed a planned gift propensity model using Python, XGBoost, and LightGBM on 318,000+ donor records to identify $100K+ planned gift prospects, achieving a 37.7% top-tier capture rate and enabling a 90% reduction in outreach volume
- Engineered behavioral features to address 53.9% missing demographic data, preserving age-related patterns by identifying correlated variables and creating interaction and quadratic terms to improve model stability
- Designed a three-tier donor prioritization framework (Top 1%, 5%, 10%) and translated analytical findings into actionable cultivation strategies, shifting advancement teams from intuition-driven review to data-driven portfolio prioritization

Spotify User Behavior Analysis, *Northeastern University*   **May 2025**
- Analyzed over 150K+ user streaming records using Python and SQL to evaluate skip behavior and listening patterns, supporting data-driven insights into user engagement and content performance
- Segmented users into 4 distinct behavioral cohorts using K-Means clustering and descriptive analytics, enabling comparative analysis of high and low engagement listeners to inform personalization strategies

U.S. Airfare Trend Analytics, *Northeastern University*   **Dec 2024**
- Analyzed over 690K domestic airfare records using SQL and Python to evaluate pre and post pandemic pricing trends across routes and carriers, enabling data-driven insights into fare volatility, demand recovery, and route-level performance
- Built interactive Tableau dashboards to track key pricing KPIs including average fare, route variance, and time-based trends, improving stakeholder visibility and reducing manual reporting effort

SKILLS

Business Analytics: Market Research, Competitive Intelligence, Financial Modeling, ROI Analysis, Statistical Analysis, Forecasting, Regression Analysis, Hypothesis Testing, Performance Benchmarking
Data & Programming: SQL, Python, Advanced Excel, Alteryx, R studio, Power Query
Visualization & Reporting: Tableau, Excel Dashboards, KPI Reporting, Data Visualization, Plotly
Business & Operations: Stakeholder Communication, Requirements Gathering, Supply Chain Analytics, Inventory Optimization, Process Improvement, Root Cause Analysis, Documentation