

SURYA YOGANANTHAN

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EDUCATION

Master of Science in Business Analytics , <i>Northeastern University, Boston, MA</i>	Dec 2025
Relevant Coursework: Data Analysis, Data Wrangling, Database Management, Data Mining, Data Visualization	GPA: 3.65
Bachelor of Technology in Mechanical Engineering , <i>Sastram Deemed University, Thanjavur, India</i>	Aug 2023

PROFESSIONAL EXPERIENCE

Business Analyst & Operations , <i>Bharat Petroleum Corporation Limited (Authorized Dealer) TN, India</i>	Dec 2023 - Present
• Used market and sales data from 354 BPCL outlets across four districts to conduct competitive and operational efficiency analysis, benchmarking performance and supporting strategic investment decisions for a \$108K greenfield expansion	
• Tracked post-launch sales and financial performance, developing client-ready ROI analyses that supported a turnaround from a \$170 monthly loss to \$1.8K profit within four months (23.3% annual ROI, 4.3-year payback)	
• Built Excel-based KPI trackers and dashboards used in executive presentations, monitoring 120+ operational metrics and translating data into clear performance narratives that drove 132% growth in monthly fuel volume	
• Applied demand forecasting and inventory analysis supported by market research and regulatory supply constraints, managing \$96K in monthly inventory while maintaining a 4-day cycle and achieving 12.2% local market share	

Graduate Teaching Assistant , <i>D'Amore-McKim School of Business Boston, MA</i>	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	

Operations Analyst Intern , <i>Mahindra & Mahindra Limited Pollachi, India</i>	Aug 2023 - Dec 2023
• 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 , <i>NU Philanthropy</i>	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 , <i>Northeastern University</i>	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 , <i>Northeastern University</i>	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, Power BI, Excel Dashboards, KPI Reporting, Data Visualization, Plotly
Business & Operations: Stakeholder Communication, Requirements Gathering, Supply Chain Analytics, Inventory Optimization, Process Improvement, Root Cause Analysis, Documentation