

PRIYADARSHINI BALASUNDARAM

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Education

University of Texas at Arlington Arlington, TX Master of Science in Business Analytics <i>Relevant Coursework: Python, Data Mining, Economic Forecasting, Business Statistics, Cloud Computing (AWS).</i>	Aug 2024 – May 2026
St. Joseph's College of Commerce Bengaluru, India Bachelor of Commerce (Analytics)	Aug 2020 – May 2023

Work Experience

University of Texas at Arlington Graduate Teaching Assistant • Instructed graduate students in Python, SQL, Supply Chain, and Business Statistics, facilitating analytical debugging to ensure academic performance for 200+ students . • Evaluated advanced technical assessments, maintaining consistency in grading standards across 2 semesters .	Aug 2025 – May 2026
Sigma Corporation Business Analytics Associate • Audited landed costs for 50+ accounts in Excel, surfacing gross margin insights that informed pricing strategy. • Analyzed \$13M in inventory to identify the top 30% of customers driving 70% of profits, enabling Cost-to-Serve prioritization. • Prepared 75,000+ records in Python (Jupyter) as ML training data to automate HTS code assignment, standardizing product descriptions and material names, removing null records and values, and using pre-verified HTS codes as ground truth. • Led financial due diligence for an acquisition target, using SQL to analyze 3-year sales trends and gross margin performance for executive decision-making, and found sales were consistent.	Jun 2025 – Aug 2025
Quick Tech Hire Business Analyst Intern • Transformed sourcing strategies by analyzing recruitment data in Excel, reducing candidate cost-per-hire by 8% . • Visualized recruitment performance metrics in Tableau to support hiring decisions across multiple departments.	Aug 2023 – May 2024
Urban Company Business Development Associate • Launched the “Daily Chefs” vertical by establishing pricing and logistics for 11 providers to capture market share. • Boosted provider earnings by 14% by tracking KPIs and implementing pricing strategies that increased utilization by 16% .	Mar 2022 – May 2022

Client Capstone Project

Cotton Growth Stage Classification & Fertilizer Timing Alert System Client: Gaiadhi <i>Team Lead</i> • Led a 4-person team building two LightGBM models in Python for Gaiadhi to classify cotton growth stage and warn 7 days before the fertilizer-critical stage, using 135K+ simulation records. • Removed stage-proxy variables that inflated early scores and validated on unseen runs, treatments and future years. • Engineered lag and rolling features, lifting future-year alert PR-AUC from 0.35 to 0.87 . • Raised stage classification macro F1 from 0.48 to 0.92 and caught 83% of upcoming transitions (84% precision) using 7 field-measurable inputs, then delivered a phased deployment roadmap.	Jan 2026 – May 2026
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Additional Projects

Grocery Price Elasticity & Promotion Analysis • Estimated price elasticity across 3 grocery categories using 10M+ weekly scanner records (93 stores) in Python, with store-SKU and week fixed-effects regressions; analgesics came out inelastic (-0.75) and cereals and frozen juices more price-sensitive (-1.4 and -1.7). • Modeled that a 5% mid-tier cereal price increase from current prices, using the estimated elasticity, would raise annual gross profit about 19% (\$580K on a \$3.06M baseline) while cutting volume about 8% . • Compared promotion types against each store-SKU's own regular-price weeks; price reductions lifted gross profit about 113% , while one promo code (G) lost money.	2026
Interest Rate Forecasting Model • Built ETS, ARIMA, ARIMAX and VAR models in R on 10 years of monthly interest rate data, with VAR(2) cutting RMSE 77% versus the ETS benchmark (0.57 vs 2.47) on a 25-month holdout. • Selected ARIMAX predictors by AICc and compared models on RMSE and MAE, where VAR's joint modeling of rates, VIX, TED spread, EFR and exchange rate had the lowest error.	2025

Skills

- **Technical Skills:** Python, SQL, R, Excel (Advanced), AWS Cloud, Tableau, Power BI, JIRA, Statistics.
- **Functional Skills:** Financial Modeling, Pricing Analytics, Supply Chain Analytics, KPI Development, Cost-to-Serve.

Certifications

Generative AI for Product Managers IBM	Oct 2026
Claude 101 Anthropic	Apr 2026
AI Fluency: Foundations and Frameworks Anthropic	Apr 2026