

Supply chain Analytics enthusiast with a B.B.A. in Operations & Supply Chain Management and an M.S. in Business Analytics (May 2026). Analyst who treats a business problem as a modeling question (if it is forecasting, optimization, or classification problem) then builds and compares approaches rather than defaulting to one toolkit. Combining my internship experiences I have been exposed to operational functions across HR, marketing, and consulting work.

PROFESSIONAL EXPERIENCE

Confederation of Indian Industry – Indian Green Building Council (CII-IGBC)

Jun 2023 – Aug 2023

Marketing Intern | Hyderabad, India

- Analyzed multi-channel campaign performance in Excel (pivot tables, VLOOKUP), attributing audience acquisition across social media (48%), print (28%), and outdoor (19%) for a 3-day expo drawing 11,500+ visitors and 75+ exhibitors.
- Coordinated 60+ cross-channel deliverables with a third-party agency, supporting a 25% lift in visibility for India's first IGBC Green Property Show.

XTGlobal Infotech Limited

Jun 2022 – Aug 2022

Human Resources Intern | Hyderabad, India

- Analyzed applicant-screening metrics in Excel to identify pipeline bottlenecks, cutting time-to-hire by 15% across AWS and RPA hiring cycles.
- Built structured candidate-evaluation frameworks to improve role matching and hiring efficiency.

EDUCATION

University of Massachusetts Amherst – Isenberg School of Management

May 2026

M.S. Business Analytics | GPA: 3.8 / 4.0 Amherst, MA

- Coursework: Supply Chain Analytics, Machine Learning, Applications of AI Models, Database Management, Business Statistics, Business Applications of Python

ICFAI Business School

May 2024

B.B.A., Operations and Supply Chain Management | GPA: 3.46 / 4.0 Hyderabad, India

- Honors: Merit Scholarship for Academic Excellence

TECHNICAL SKILLS

Procurement& Supply Chain tools: Python(pulp,LpSum),SAP BusinessObjects, Excel (Pivot Tables, VLOOKUP, Macros)

Data Programming: Python (pandas, scikit-learn, NumPy), R, SQL (joins, subqueries, aggregation, window functions)

Statistical & ML Methods: Random Forest, Logistic Regression, Classification Trees, Neural Networks, Hypothesis Testing, EDA, Feature Engineering

Technical Platforms: Microsoft 365, Google Tools, Tableau, Slack, Power BI, Excel, VDA

Gen AI: Anthropic Claude, OpenAI ChatGPT, Google Gemini, Microsoft Copilot, Harvard AI Sandbox, DeepSeek

PROJECTS

Plant Assignment Optimization Using Mixed-Integer Programming | Descriptive & Diagnostic Analytics

Summer 2026

- Built a Generalized Assignment Problem (mixed-integer linear program) in Python (PuLP/CBC) to optimize plant-order routing across 9,215 real orders and 19 manufacturing plants; found a \$146K (0.9%) cost-reduction opportunity while enforcing real capacity, product-eligibility, and contractual (VMI) constraints.
- Conducted Pareto/ABC concentration, delivery-performance, carrier scorecard, and capacity-utilization analysis using pandas and matplotlib, surfacing operational insights (e.g., 63% of volume concentrated in 5 of 46 customers) beyond the core optimization.

Business Analytics Practicum | Strategy & Consulting – MSBDC | UMass Amherst

Spring 2026

- Performed EDA on MSBDC client, sales, and trade data across 14+ counties (FY22–FY25); mapped international trade activity by country to identify Europe as the dominant export market for MSBDC-assisted businesses, ahead of Canada and Asia-Pacific.
- Segmented clients by industry and consultation pattern, uncovering a mismatch: MSBDC directed the most consultation hours toward service-based clients, while product-based businesses showed faster export growth in Europe despite receiving comparatively less support.
- Recommended reallocating consultation resources toward these higher-performing client segments, giving MSBDC leadership data to strengthen funding and policy conversations with state and federal partners on small business investment.

Supply Chain Analytics | Geospatial Optimization – Amazon Prime Air

Fall 2025

- Designed a 3-hub drone fulfillment network across 14 Massachusetts counties serving 5M+ residents by applying Center of Gravity and Huff Gravity models to demographic, e-commerce, delivery-distance, package-weight, weather, and bandwidth data to site candidate drone hub locations, validating coordinates against Google Earth.
- Identified Newton hub as capturing 72.35% of statewide demand (4,926 daily deliveries within a 5-mile radius) versus Worcester (1,068) and Springfield (1,020), informing lead-time and inventory-allocation strategy.
- Recommended Newton as the primary hub, with Worcester as a secondary option, delivering a phased deployment roadmap and executive memo covering procurement trade-offs, rollout-sequencing cost savings, regulatory constraints (FAA BVLOS), and open risks of drone range/endurance and real-time data availability for leadership to resolve before a full state rollout.

Pricing Intelligence Model – Airbnb (New Orleans)

Fall 2025

- Preprocessed 7,444+ Airbnb listings using IQR-based outlier detection; engineered 10+ features including amenity count, host tenure, availability, and guest capacity. Identified bathrooms as the strongest price driver (44% feature importance) via an optimized Random Forest model achieving $R^2 = 0.58$ and 86.6% of predictions within \$100 of actual price.
- Uncovered neighborhood-level pricing disparities (French Quarter average: \$5,660 vs. citywide median: \$111), informing host pricing strategy and platform dynamic-pricing recommendations.

Machine Learning | Model Benchmarking – Credit Card Default Prediction

Fall 2025

- Benchmarked Logistic Regression (AUC 0.772), Classification Tree (AUC 0.760), and Neural Network (AUC 0.696) across 25+ architectures on 10,000 customer records for credit-default prediction.
- Performed EDA, data cleaning, dummy-variable creation, tree pruning, and lift-chart analysis to optimize model cutoff thresholds (0.26 selected for best F1 = 0.542). Recommended Logistic Regression for production deployment based on superior F1 score and regulatory interpretability, with a three-tier intervention strategy (high / medium / low risk).

Statistical Analysis – Hybrid Work Adoption Among U.S. Employers

Spring 2025

- Tested the hypothesis that >50% of U.S. companies have permanently adopted hybrid work by 2026, using a systematically constructed sample of 29 companies across industries (IT, Finance, Retail, Manufacturing, Health Services, Hospitality, Government, Education)
- Observed that the hybrid rate of 62.1% did not reach statistical significance at $\alpha = 0.05$ ($z = 1.30$, $p = 0.097$); 95% Wilson CI [0.44, 0.77] spanned the null boundary. Key takeaway being conclusion is industry conditional, IT industry reached almost 80% hybrid while the other industries were significantly lower.

COURSES/CERTIFICATIONS link <https://www.linkedin.com/in/vyshnavisiddula/details/certifications/>