

Pranav Kaja

☎ +1 413 472 4729 | ✉ balajipranavreddyk@gmail.com | in balajipranav | 📱 pranavkaja.vercel.app

EDUCATION

University of Massachusetts Amherst

Master of Science in Business Analytics | **GPA: 4.00/4.00**

Coursework: Machine Learning, Data Management, Statistics, Data Visualization, Project Management

Amherst, MA

Sep 2024 – May 2026

GITAM Deemed to be University

Bachelor of Technology in Computer Science and Engineering

Aug 2019 – May 2023

SKILLS

Analytics & Business Intelligence: Power BI (Advanced DAX), Tableau, Business Data Analysis, A/B Testing, Cohort Analysis, KPI Dashboarding, Storytelling

Programming & Data Engineering: Python (Pandas, NumPy, Scikit-learn), SQL (PostgreSQL, Window Functions), R, Advanced Excel (PivotTables, Power Query, VBA), ETL Pipelines, Data Warehousing

Modeling & Strategy: Random Forest, Gradient Boosting, Logistic Regression, SHAP, Feature Engineering, Demand Forecasting, Supply Chain Optimization, Financial Modeling

PROFESSIONAL EXPERIENCE

UMass Amherst Dining Services

Student Supervisor

Amherst, MA

Sep 2024 – May 2026

- Engineered an automated ETL pipeline in VBA and Power Query to parse daily transaction data across 37 retail locations, cutting manual entry by 90%
- Segmented 15,000 daily patrons by volume and product mix, reallocating staffing during peak windows to raise throughput at flat labor cost
- Forecasted daily inventory flows from historical demand, adjusting procurement to prevent stockouts and trim carry on slow-moving SKUs
- Audited operational data across prep and service stages to surface root-cause inefficiencies, lifting total yield by 27%

Acmegrade

Data Science Intern

May 2022 – Jul 2022

- Built Random Forest and Gradient Boosting classifiers on a 100,000-record client portfolio, lifting predictive accuracy by 15% over baseline
- Automated data cleaning and reporting workflows in Python, cutting preparation time by 30% and accelerating insight delivery

TECHNICAL & OPERATIONS PROJECTS

Fraud Detection Engine | XGBoost, Imbalanced Classification

- Trained XGBoost on 284,807 transactions, lifting AUC from 0.60 to 0.978 with weighted loss for 577:1 imbalance
- Tuned regularization and feature handling on a 0.17% fraud class, holding 84% recall and 84% precision

End-to-End Heart Disease Prediction Engine (Capstone) | Python, Scikit-learn

- Processed 70,000+ records through ensemble classifiers (Random Forest, SVM, KNN) to reach 92% accuracy
- Deployed a Flask full-stack application for real-time risk scoring through a structured interface
- Visualized critical correlation factors with SHAP values to explain underlying decision logic

TapInnovations Corporate Analytics | Power BI, DAX

- Designed executive Power BI dashboards on live B2B streams, cutting weekly review time by 30%
- Wrote custom DAX measures giving leadership direct visibility into cross-functional throughput

Global Supply Chain Optimization | HBP Simulation, Sourcing Strategy

- Executed a hybrid sourcing strategy with statistical buffering, holding a 34% cumulative margin over 4 years

Isenberg Strategy Summit – Capsim Simulation | Pricing Strategy, Capacity Planning

- Calibrated pricing and capacity over 5 simulated years, recovering stock valuation 483% and finishing top-3 of 8

LEADERSHIP & ACTIVITIES

Esports SIG - GITAM

Operations and Finance Lead

Sep 2022 – Jul 2023

- Tracked finances across 7 concurrent programs, tripling turnout to 1,800+ through data-led scheduling
- Secured 100% external sponsor funding through structured outreach and governance documentation, eliminating reliance on university budgets

Crescendo Magazine - GITAM

Marketing and Social Media Coordinator

Sep 2022 – Jul 2023

- Led a 5-person team across two campaign cycles, growing audience engagement by 170%