Rakshit Madan

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EDUCATION

M.S in Business Analytics, Drexel University, Philadelphia, PA – GPA: 3.95 **Sep 2023 – Mar 2025**

Coursework: Statistics, Machine Learning, Geospatial Analytics, Linear Programming, FinTech, Corporate Finance

Bachelor of Commerce (Honours), University of Delhi, Delhi, India **Jul 2013 – Jun 2016**

TECHNICAL SKILLS

- **Languages & Scripting:** Python, R, SQL (Postgre SQL, SQLite, MySQL, Athena)
- **Database & Data Management:** SQL Databases, ETL Pipelines, dbt (familiar), Data Cleaning & Transformation
- **Visualization & Reporting:** Power BI, Tableau, Advanced Excel (VBA, macros, pivot tables), R Markdown
- **Cloud & Tools:** AWS (Sagemaker, Athena, S3), BigQuery (familiar), Snowflake (familiar)
- **Project & Process Management:** Agile, JIRA, Process Flow Diagrams, User Stories, Stakeholder Management,
- **Techniques:** KPI Tracking, Demand Forecasting, A/B Testing, Trend Analysis, Hypothesis Testing

WORK EXPERIENCE

Tech Impact – *Business Analyst Intern,* Philadelphia PA **Jun 2024 - Mar 2025**

- Analyzed census and administrative data with Python and SQL (CTEs, Joins, window functions) for a $1.6 M workforce initiative, mapped demographics, connected 500+ participants to training providers, and boosted reach by 15%.
- Automated Qualtrics survey pipelines with Python rule-based logic to assess nonprofit technical maturity and generate service recommendations, cutting turnaround by 40% and lifting client engagement by 25%.
- Built and automated monthly Power BI dashboards using advanced Excel macros to track operational KPIs, reducing report preparation time by 50 percent and saving over 20 hours per month for leadership teams.
- Performed root-cause analysis of support tickets with SQL and partnered with IT and Ops to streamline workflows, reducing resolution time by 20%.

Ganit Inc. – *Senior Data Analyst,* India **Sep 2019 - Aug 2022**

- Led a team of four in developing a real-time fraud detection dashboard using SQL and Tableau atop a heuristic, multi-step algorithm, reducing authentication time from 80 hours to 1 hour per 100 claims and enabling potential savings of $8–$10M annually.
- Generated a prioritized product list for a Fortune 500 FMCG client using Logistic Regression and Cosine Similarity, boosting sales by 3.1% and halving computation time through a Python pipeline on AWS SageMaker.
- Engineered a supply-chain optimization solution using Python to model safety stock levels and reorder points for 60% of distributors, reducing stock imbalances and increasing supply-chain profitability by 15%.
- Built a Marketing Mix model using Linear Regression on Nielsen media and pricing data for a global FMCG client, quantifying the revenue impact of pricing and promotional activity and driving a 5% YoY margin lift.

Progresso Research & Analytics – *Data Analyst,* India **Oct 2018 - Aug 2019**

- Conducted data analysis for 50+ market research initiatives, using Excel and survey analytics to uncover consumer trends, inform targeted marketing strategies, and boost brand positioning by 15%.
- Constructed and implemented an NPS (Net Promoter Score) framework, measuring customer loyalty and sentiment, increasing customer satisfaction by 25% and retention rates by 10% through targeted engagement strategies.

Qrioh Retail – *Data Analyst Intern,* India **Mar 2018 - Sep 2018**

- Performed data analytics and predicted the potential cities favorable for expansion by creating a Plausibility Index using variables like population density, mobile penetration, literacy rate, internet availability, modernization variables.
- Built a demand forecasting model using Linear Regression on sales data to predict phone cover demand at the brand level, enabling better production prioritization.

PROJECTS

Wildfire Risk Analysis | *Python, ArcGIS, K-Means Clustering*

- Implemented a K-Means clustering model to classify 16,256 properties based on wildfire risk factors, improving insurance pricing accuracy and refining risk assessments.
- Integrated ArcGIS wildfire data with Precisely's dataset using the Ball Tree Algorithm, enhancing underwriting precision by 30% through optimized premium adjustments based on proximity to the nearest fire.

Credit Risk Scoring and Loan Prediction | *R, SQL, Lasso/Ridge Regression*

- Built a Lasso and Ridge Regression model on 396K+ Lending Club records to forecast loan amounts with 87% accuracy, diving deep into interest rate and borrower grade as key predictors.
- Identified borrower anomalies using VIF and residual diagnostics, enhancing credit risk and fraud detection with a customer-first approach.