Krupa Shah

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EDUCATION

University of Maryland, Robert H. Smith School of Business

Master of Science in Information Systems, GPA: 3.4

College Park, MD, USA

Aug 2023 - Dec 2024

University of Mumbai, Dwarkadas J. Sanghvi College of Engineering

Bachelor of Engineering in Electronics, GPA: 3.6

Mumbai, MH, India Aug 2017 - May 2021

TECHNICAL SKILLS

Data Analysis and Statistics: Data Wrangling, Exploratory Data Analysis, Hypothesis Testing, Regression, Time Series, KPI Tracking, A/B Testing Programming and Querying: SQL (MySQL, PostgreSQL), Python (Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn), R, PySpark, Excel (VBA, Macros) Visualization and Reporting: Tableau, Power BI, Looker, Google Data Studio, AWS QuickSight, Dashboard Development, Data Storytelling Data Engineering and Cloud: Snowflake, Databricks, BigQuery GCP, SSIS, Informatica, Apache Airflow, DataIKU, AWS (S3, Lambda), Azure DevOps Tools and Collaboration: Git, JIRA, Confluence, SAP, Alation, MS Access, Agile (Scrum), Lean Six Sigma, Business Requirements Gathering

WORK EXPERIENCE

WorldLink US Dallas, TX, USA

Data Analyst

May 2025 - Present

- Crafted SQL- and Python-driven workflows to analyze and monitor 25,000+ monthly customer intents, reducing manual intervention and improving reporting accuracy for leadership review.
- Designed dashboards and performance tracking reports that measured routing efficiency across banking IVR queries, cutting system routing time from 3.2s to 1.8s and reducing average customer wait times.
- Deployed an AWS-based IVR analytics pipeline with compliance logging and notifications, shortening average call resolution time by 2.5 minutes per customer and improving SLA adherence.
- Engineered Python-based reporting pipelines for analyzing 1,200+ task clusters, improving retrieval efficiency by 1.4x for manual quality review.

University of Maryland, Robert H. Smith School of Business

College Park, MD, USA

Sep 2024 - Dec 2024

Research Assistant

Data Analyst

- Conducted A/B testing and statistical evaluations that drove \$500K+ in strategic budget reallocations across three marketing campaigns.
- Built Tableau dashboards consolidating 12+ KPIs, empowering 10+ stakeholders to monitor campaign performance and adapt strategy weekly.
- Created weekly reporting templates in Tableau and Excel to track campaign trends, enabling stakeholders to optimize allocation decisions and improve forecasting accuracy.
- Automated data extraction from 15+ websites, saving 10+ weekly analyst hours and ensuring consistent, high-quality datasets for analysis.

University of Maryland, Education Abroad Program

College Park, MD, USA

Jan 2024 – Dec 2024

- Analyzed advisor-student approval workflows and assembled Excel-based dashboards & Salesforce reporting views, reducing approval lag by 35% and improving SLA compliance for 500+ applications annually.
- Generated workload forecasting models Excel and SQL-based utilization reports, enabling resource reallocation that cut time by 20%.
- Standardized KPI definitions across hubs by leading 10+ workshops, improving consistency on workload, approval time, and completion rates.
- Piloted User Acceptance Testing (UAT)-based Quality Assurance (QA) process that caught 100% of critical system bugs, resulting in a demonstrable 10% increase in application completion rates.
- Customized Figma prototypes and role-based dashboards that visualized advisor caseload trends, boosting stakeholder satisfaction by 40%.

Perdue Farms, Agribusiness

Salisbury, MD, USA

Business Analyst Intern May 2024 - Aug 2024

- Devised SQL- and Python workflows in DataIKU, reducing operational reporting effort by 90% and improving response time during outages.
- Streamlined Power BI dashboards surfacing supply chain bottlenecks, reducing delays by 5% and enabling leadership to make data-driven decisions that prevented \$250K+ in excess inventory costs.
- Rewrote SQL queries in 12+ executive reports for Snowflake, halving refresh times and improving timeliness of supply chain decisions.
- Collaborated with team to **design automation requirements**, saving ~30% of analyst effort per reporting cycle and improving SLA compliance.

Cognizant Technology Solutions

Data Analyst

Mumbai, MH, India

Sep 2021 - Jun 2023

- Outlined Snowflake-based BI data models and implemented governance standards that empowered 7 business units with scalable selfservice analytics, reducing dependency on central data teams by 60% and significantly accelerating leadership decision-making processes.
- Integrated fully automated data validation checks into the ETL process, ensuring 99.99% data accuracy across all reports and dashboards, and resulting in a 20% reduction in time spent on manual data reconciliation for analysts.
- Systematized more than 50+ recurring reports using SQL workflows with validation layers, achieving 100% SLA compliance and saving 200+ analyst hours per quarter, while improving transparency and accuracy in executive reporting deliverables.
- Optimized long-running SQL queries with indexing, partitioning, and advanced refactoring techniques, reducing execution times by up to 70% and effectively halving dashboard refresh rates, ensuring better performance for end users across departments.

PROJECT EXPERIENCE

VideoRAG - Multimodal Video QA System (Python, Qwen 2.5v API, Qdrant, CLIP, Whisper, React)

Engineered an end-to-end multimodal RAG system for 5-min videos (<2s latency, 92% accuracy), integrating frame/audio embeddings with a React UI for real-time retrieval, source-verified responses reducing hallucinations and enabling scalable QA for knowledge-heavy domains.