Aditi Kharkwal

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Objective

Detail-oriented and innovative Data Engineer with 3+ years of experience in designing, optimizing, and maintaining scalable data pipelines. Proficient in Python, SQL, and cloud platforms such as AWS and GCP, with a strong background in ETL development, real-time data processing, and big data tools.

Education

University of Washington — September 2022 - March 2024
Master of Science in Data Science — *CGPA: 3.88/4.0*

Vellore Institute of Technology — July 2016 - May 2020
Bachelor of Technology in Information Technology — *CGPA: 8.5/10*

Technical Skills

Programming Languages: Python, SQL, R
Data Analysis: A/B Testing, Statistical Modeling, Predictive Analytics, Data Visualization
Tools: Tableau, Power BI, Apache Spark, Apache Airflow, Hadoop, SAP BODS, UiPath
Database Systems: Oracle, MySQL, SAP HANA, Snowflake, Hive
Cloud Platforms: AWS, GCP

Professional Experience

Data Engineer — **April 2024 - Present**
Micron Technology

- Developing and optimizing ETL pipelines to integrate various data sources (SAP, Snowflake, JDBC) into Celonis for enhanced process scalability and data architecture efficiency.
- Collaborating with Supply Chain and Global Procurement stakeholders to streamline data flows, improving inventory forecasting accuracy and optimizing procurement processes for cost savings and operational efficiency.
- Leading migration efforts to Snowflake, optimizing data processes for improved distributed systems.
- Implemented and automated pipeline using LLMs to extract data from PDF, convert to JSON format and ingest into SAP, reducing data processing time by 20% and manual entry by 99%, while enhancing data accuracy.

Data Analyst Intern — **June 2023 - September 2023**
Micron Technology

- Analyzed enterprise architecture to streamline data pipelines and ensure efficient data processing workflows.
- Developed a Tableau dashboard providing insights into infrastructure cost and capacity utilization, reducing manual refresh time by 20 minutes daily.
- Identified and resolved data gaps, improving data accessibility and efficiency for Snowflake migration.

Business Intelligence Developer — **January 2020 - September 2022**
Wolters Kluwer

- Automated scalable ETL pipelines, enhancing data processing efficiency by over 30%.
- Orchestrated database migration from Oracle to SAP BW, achieving 95% accuracy in data extraction and reducing report runtime by 30 minutes.
- Designed, developed and optimized SAP reports and Dashboards converting business requirements into actionable data insights.

Projects

- **Generating synthetic data for AWS to test resilience of their new hard drives**: Used and compared various statistical and Generative models to generate conditional synthetic data, with Gaussian Copula achieving the highest data quality of 92% compared to all models.
- **Stacked Ensemble Machine Learning**: Created a University Admission Prediction System with a 15% improvement in accuracy using Stacked Ensemble Learning.
- **Statistical modelling to identify most dangerous intersections in WA state**: Analyzed traffic data using statistical models to assess factors like traffic volume, weather, and time of day. Results showed intersections with high traffic volume and poor weather conditions had a 30% higher likelihood of severe accidents. Identified the top 10 most dangerous intersections.

Certifications and Affiliation

- Azure Open AI certification
- Microsoft Learn Student Ambassador (Dec 2017 - June 2020)
- Mentorship co-Pillar Lead for Women's Initiative Network at Wolters Kluwer (June 2020 - MArch 2021)
- Commerce Lead for Micron Young Prfessionals (August 2024 - current)
- Graduate speaker at University of Washington MSDS Graduation.