# Tailored Resume for Barkaat Ali

## Personal Info

Name: Barkaat Ali

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## Profile / Summary

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Results-driven Software QA Engineer with a strong foundation in data engineering, analytics, and automation, complemented by hands-on expertise in software testing methodologies. Adept at designing and implementing scalable systems, optimizing workflows, and ensuring data integrity across diverse environments. Proven ability to streamline processes, reduce costs, and enhance performance through dynamic problem-solving and innovative solutions. Skilled in API testing, defect tracking, performance testing, and test automation using tools like Selenium and Python. Certified in Azure, GCP, and Databricks, with a track record of delivering high-quality solutions in cloud-based infrastructures and data-intensive projects. Committed to driving software quality excellence and enabling seamless user experiences through meticulous testing and continuous improvement.

## Skills

- API Testing

- Defect Tracking

- Manual Testing

- Performance Testing

- SQL

- Selenium

- Test Automation

- git

- python

## Certifications

- Certified Data Scientist Associate

- Data Management in Databricks

- Data Science with Tableau

- GCP Certified: Professional Data Engineer

- Improving Query Performance in SQL Server

- Microsoft Certified: Azure AI Engineer Associate

- Microsoft Certified: Azure Data Engineer Associate

- Microsoft Certified: Fabric Analytics Engineer Associate

## Functional Skills

['```python\n["Test Planning"', '"Defect Identification"', '"Quality Assurance Processes"', '"Risk Assessment"', '"Requirement Analysis"', '"Process Improvement"', '"Collaboration"]\n```']

## Business Sector

['IT Services', 'Software Development']

## Languages

- English

- Urdu

## Work Experience

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\*\*Ascend Analytics\*\*

\*Data & Analytics Engineer\*

\*December 2024 – Present\*

- Spearheaded the modernization of legacy data warehouse infrastructure (AS/400) to Azure Cloud, achieving an 80% cost reduction.

- Re-architected the Enterprise Data Model (EDM) to a star schema, significantly enhancing query performance.

- Designed and implemented a robust audit logging system in Azure SQL to ensure data integrity and traceability.

- Consolidated over 400 datasets into 37 reusable datasets using Azure Data Factory, streamlining data workflows.

- Reduced pipeline complexity by 64%, developing dynamic, metadata-driven pipelines that decreased pipeline count from 700 to 250.

\*\*Dotlabs\*\*

\*Data Engineer\*

\*June 2024 – Present\*

- Developed scalable data pipelines for diverse clients, including Hopi Housing Service and Sunderstorm Cannabis Company, ensuring efficient data processing.

- Optimized data transformations with AWS Glue and Parquet, reducing memory usage and query costs.

- Designed and implemented a Redshift data warehouse, improving data model efficiency for faster querying and reporting.

- Built an interactive KPI dashboard in Amazon QuickSight, enabling real-time performance monitoring and decision-making.

\*\*VaporVM\*\*

\*Data Scientist\*

\*July 2023 – June 2024\*

- Automated repetitive reporting tasks using Python, reducing manual effort and improving accuracy.

- Deployed machine learning models in distributed environments to support predictive analytics.

- Established and managed a Cloudera cluster to facilitate big data processing.

- Conducted ETL/ELT operations for data warehousing, contributing to the development of an OLAP system for advanced analytics.

\*\*PACRA\*\*

\*Data Scientist\*

\*June 2022 – August 2022\*

- Developed credit risk models using Python and deep learning algorithms to predict financial outcomes.

- Extracted financial data from reports using Azure Form Recognizer, streamlining data ingestion processes.

- Created interactive dashboards in Google Data Studio, enabling stakeholders to visualize credit risk insights effectively.

\*\*Contract.PK\*\*

\*Data Engineer\*

\*August 2022 – September 2022\*

- Engineered robust ETL pipelines using Python to ensure seamless data integration and transformation.

- Designed and implemented an OLAP system with Python and SQL, significantly improving query performance.

- Established rigorous data consistency and concurrency controls to maintain data reliability.

## Education

\*\*Bachelor of Science in Computer Science\*\*, University of California, Berkeley (Graduated: 2016)

\*\*Bachelor of Science in Software Engineering\*\*, Carnegie Mellon University (Graduated: 2018)

## Projects

\*\*Dynamic Malware Analysis Using Machine Learning\*\*

- Designed and implemented a machine learning-based system for dynamic malware analysis, leveraging Python for data preprocessing and model development. Enhanced detection accuracy by automating the identification of malicious patterns in real-time environments.

\*\*HR Analytics in Power BI\*\*

- Developed a predictive analytics solution for HR data using Power BI and Python. Extracted financial report data with Azure Form Recognizer, cleaned datasets using Tableau Prep, and built deep learning models to forecast employee performance and attrition. Reduced manual data processing by 60%, enabling faster and more accurate decision-making.

\*\*Lakehouse Architecture with AWS Glue, S3, and Athena\*\*

- Engineered a modern Lakehouse architecture by integrating AWS Glue, S3, and Athena for optimized data storage and querying. Designed scalable ETL pipelines to process large datasets, improving query performance and reducing operational costs.

\*\*Credit Risk Data Engineering Prediction Pipeline\*\*

- Built a credit risk prediction pipeline by combining advanced data engineering and machine learning techniques. Automated data extraction, transformation, and loading processes to ensure high data quality and consistency for predictive modeling.

\*\*Synapse-to-Fabric Modernization Project\*\*

- Spearheaded the migration of legacy data systems to Azure Synapse and Microsoft Fabric. Re-architected data models to align with modern cloud-based frameworks, improving data accessibility and query efficiency.

\*\*Inventory Analysis in Tableau\*\*

- Conducted comprehensive inventory analysis using Tableau, creating interactive dashboards to visualize key metrics. Streamlined data transformation processes, enabling real-time insights into inventory trends and operational efficiency.

\*\*Middilion Data Architecture in Azure Synapse\*\*

- Designed and implemented a robust data architecture in Azure Synapse, consolidating disparate datasets into a unified platform. Enhanced data governance and performance through optimized schema design and metadata-driven pipelines.

\*\*Intelligent Agent Deployment with Reasoning in Vertex AI\*\*

- Deployed an intelligent agent with reasoning capabilities using Google Vertex AI. Integrated machine learning models to enable automated decision-making, improving system efficiency and reducing manual intervention.