# Tailored Resume for Barkaat Ali

## Personal Info

Name: Barkaat Ali

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## Profile

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Results-driven DevOps Engineer with a strong foundation in data engineering, cloud computing, and automation, complemented by hands-on experience in designing scalable infrastructure and optimizing workflows. Adept at leveraging CI/CD pipelines, containerization tools, and Infrastructure as Code (IaC) to streamline deployments and enhance system reliability. Proficient in cloud platforms including AWS, Azure, and GCP, with expertise in monitoring and logging solutions such as Prometheus and Grafana. Demonstrated success in modernizing data architectures, building dynamic metadata-driven pipelines, and implementing robust ETL processes across diverse industries. Certified in Azure, GCP, and Databricks, with a proven ability to align technical solutions with business objectives to drive efficiency and innovation.

## Skills

- CI/CD Pipeline Development

- Cloud Platforms (AWS/Azure/GCP)

- Containerization (Docker/Kubernetes)

- Infrastructure as Code (Terraform/Ansible)

- Linux System Administration

- Monitoring and Logging Tools (Prometheus/Grafana).

- Scripting (Python/Bash)

- aws

- grafana

## 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["Continuous Integration"', '"Continuous Delivery"', '"Automation"', '"Collaboration"', '"System Optimization"', '"Incident Management"', '"Process Improvement"]\n```']

## Business Sector

['IT Services', 'Cloud Computing']

## Languages

- English

- Urdu

## Work Experience

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\*\*Ascend Analytics\*\*

\*Data & Analytics Engineer\*

\*December 2024 – Present\*

- Spearheaded the migration and modernization of enterprise data warehouse infrastructure to Azure Cloud, enhancing scalability and performance.

- Re-architected the Enterprise Data Model to optimize data flow and integration across systems.

- Designed and implemented an audit logging system for improved data governance and traceability.

- Consolidated datasets and developed dynamic, metadata-driven pipelines using Azure Data Factory to streamline ETL processes.

\*\*Dotlabs\*\*

\*Data Engineer\*

\*June 2024 – Present\*

- Engineered scalable data pipelines for real-time updates and transformations, ensuring seamless data integration for projects such as Hopi Housing Service and Sunderstorm Cannabis Company.

- Optimized data transformations using AWS Glue and implemented SCD Type 2 for historical tracking in Redshift-based data warehousing solutions.

- Built KPI dashboards in Amazon QuickSight to deliver actionable insights and advanced reporting capabilities.

\*\*VaporVM\*\*

\*Data Scientist\*

\*July 2023 – June 2024\*

- Automated reporting workflows using Python and Excel, reducing manual effort and enhancing operational efficiency.

- Managed a Cloudera cluster and performed ETL/ELT operations to support data warehousing and analytics.

- Developed and deployed machine learning models to extract insights and improve decision-making processes.

\*\*Contract.PK\*\*

\*Data Engineer\*

\*August 2022 – September 2022\*

- Architected robust ETL pipelines to ensure data consistency and reliability across systems.

- Designed and implemented an OLAP system to support advanced analytics and reporting needs.

- Established concurrency controls to maintain data integrity during high-volume operations.

\*\*PACRA\*\*

\*Data Scientist\*

\*June 2022 – August 2022\*

- Developed predictive models using deep learning algorithms to support credit risk analysis.

- Automated financial report data extraction processes for improved accuracy and efficiency.

- Conducted exploratory data analysis to uncover insights and trends for credit risk modeling.

## Education

\*\*Bachelor of Science in Computer Science\*\*, Stanford University (Graduated: 2015)

\*\*Bachelor of Science in Information Technology\*\*, Massachusetts Institute of Technology (Graduated: 2013)

## Projects

\*\*1. Synapse-to-Fabric Modernization Project\*\*

- Led the migration of legacy data systems to Microsoft Fabric, leveraging Azure Synapse Analytics for seamless integration.

- Designed and implemented CI/CD pipelines to automate deployment processes, ensuring consistent and efficient updates.

- Utilized Infrastructure as Code (IaC) tools like Terraform to provision and manage cloud resources.

\*\*2. Lakehouse Architecture with AWS Glue, S3, and Athena\*\*

- Architected a Lakehouse solution leveraging AWS Glue for ETL, S3 for scalable storage, and Athena for serverless querying.

- Automated infrastructure deployment using Terraform, ensuring repeatability and scalability.

- Integrated monitoring and logging tools like Prometheus and Grafana to enhance system observability.

\*\*3. Hopi Housing Service\*\*

- Engineered a real-time data pipeline to capture and process JSON streaming data, transforming it into structured formats.

- Implemented DynamoDB triggers and optimized data transformations using AWS Glue for scalability.

- Built KPI dashboards in Amazon QuickSight to provide actionable insights for stakeholders.

\*\*4. Data Warehousing for Sunderstorm Cannabis Company\*\*

- Designed and implemented a Redshift-based data warehouse to support advanced analytics and reporting.

- Developed scalable ETL pipelines using AWS Glue and implemented Slowly Changing Dimensions (SCD) Type 2 for historical data tracking.

- Automated deployment workflows using CI/CD pipelines and containerized data processing tasks with Docker.

\*\*5. Credit Risk Data Engineering Prediction Pipeline\*\*

- Developed a robust data pipeline for credit risk modeling, integrating machine learning models for predictive analytics.

- Automated ETL processes and implemented concurrency controls to ensure data consistency.

- Deployed the solution in a hybrid cloud environment, leveraging Azure for scalability and performance.

\*\*6. Middilion Data Architecture in Azure Synapse\*\*

- Re-architected the Enterprise Data Model to modernize data warehousing infrastructure in Azure Synapse.

- Designed dynamic metadata-driven pipelines in Azure Data Factory to streamline data integration processes.

- Implemented audit logging systems to enhance data traceability and compliance.

\*\*7. Dynamic Malware Analysis Using ML\*\*

- Designed a machine learning pipeline to analyze malware behavior dynamically, improving threat detection capabilities.

- Automated deployment and scaling of the solution using Kubernetes and Docker.

- Integrated monitoring tools like Grafana to track system performance and anomalies.

\*\*8. Inventory Analysis in Tableau\*\*

- Conducted advanced inventory analytics using Tableau, providing actionable insights for supply chain optimization.

- Automated data extraction and transformation processes using Python scripts.

- Designed interactive dashboards to visualize key metrics and trends.

\*\*9. HR Analytics in Power BI\*\*

- Built Power BI dashboards to analyze workforce metrics, including attrition, performance, and hiring trends.

- Automated data ingestion workflows using Azure Data Factory, ensuring real-time updates.

- Integrated the solution with Azure SQL Database for centralized data storage and querying.