

Sheikh Azaharuddin Quazi
Cloud Architect/Senior Software Engineer

Email: s.a.q.professional@gmail.com, Phone: +1 201-423-8728, Location: Jersey City NJ

Profile

Seasoned AWS Architect with over 8 years of experience in designing and implementing scalable cloud solutions, specializing in AWS. Proven track record in leading complex projects, enhancing system efficiencies, and reducing costs through innovative architectural improvements and automation. Skilled in Cloud Migration, Cloud Security and compliance, Cloud infrastructure, Serverless Data processing, DevOps practices, data lake implementation, and CI/CD, with a strong focus on optimizing end-user experience and operational excellence.

Areas of Expertise

AWS Solution Architecture - Cloud Infrastructure Management - DevOps Practices - Data Lake Implementation - Performance Optimization - Project Leadership - Security and Compliance - Software Development - Cost Reduction Strategies - Innovative Problem Solving - Enterprise Cloud Migration - Data Security and Encryption – Advanced Networking - Automation Technologies - Multi-Cloud Environments - API Design and Management - Business Continuity Planning - Backup and Disaster Recovery

Professional Experience

AWS Architect - Sr Engineer

Corteva Agriscience

Jersey City NJ, 06/2024 -

Present

The project involves the migration and modernization of a legacy allele repository application used in This project focuses on migrating and modernizing a legacy allele repository application, used in genotype plant breeding, from a Hadoop-based infrastructure to AWS EMR with HBase. The existing application, built on .NET 4.5 and C# with Java-based jobs, relies on HBase as the backend database. The modernization effort involves leveraging AWS services such as SQS, AWS Batch, Step Functions, SNS, and Lambda to improve performance, scalability, and workflow automation.

- Moved from a legacy Hadoop setup to AWS EMR, ensuring seamless integration of HBase for the backend.
- Implemented AWS SQS to handle asynchronous messaging and task distribution.
- Utilized AWS Batch for scheduling and executing large-scale batch jobs.
- Leveraged AWS Step Functions for orchestrating and automating complex workflows.
- Integrated AWS SNS and Lambda functions to enable real-time notifications and automated event processing.

AWS Solutions Architect/Data Engineer,

Cloudtech Inc

New York City, NY 08/2023 –

05/2024

Delivered a transformative end-user computing solution using Amazon AppStream to address compatibility issues between Windows-exclusive software and Mac systems. This solution centralized

software distribution and system configuration, enhancing the operational efficiency of customer care agents by providing a seamless, cloud-based user environment optimized for the call center software.

- Engineered a custom Amazon AppStream image, enabling compatibility of Windows-exclusive call center software for Mac users, eliminating the need for physical Windows laptops and reducing hardware costs.
- Established a robust change management pipeline utilizing AWS Developer Tools and Systems Manager, streamlining software updates, and system configuration, leading to improved management efficiency and system reliability
- Innovated a file retention mechanism through S3 integration in the session script, resolving Five9's data storage challenges, and ensuring compliance with data retention policies.
- Built and managed cloud infrastructure using AWS CDK implementing best practices for infrastructure as code and continuous integration. Integrated security best practices into development and operational pipelines.

[Serverless Smart Quiz App](#) for AWS Reinvent:

- Designed and developed a serverless quiz application leveraging AWS serverless services like Lambda, DynamoDB, API Gateway, and CloudFront.
- Implemented serverless APIs using AWS Lambda and API Gateway, enabling scalable and cost-effective application functionality.
- Wrote Efficient Python code for data retrieval and loading to DynamoDB and build front end in React. Used Amplify to deploy the application.
- Utilized DynamoDB as a NoSQL database to store and retrieve quiz questions and user responses, ensuring high availability and low latency.
- Integrated CloudFront for content delivery, improving application performance and reducing latency for users across different geographical locations.
- Implemented threat detection Security mechanism and secured backend APIs with WAF rules.

AWS Architect / Sr Software Engineer,
Consultadd Services Pvt Ltd
07/2023

Pune, MH, India 06/2016 -

Cloud Migration and Data Management

Executed a comprehensive data management strategy, transitioning to a cloud-based, scalable ETL process with PySpark, facilitating a secure Oracle Exadata migration to AWS RDS, and enabling continuous data sync to AWS Redshift. This migration led to enhanced data processing capabilities, improved security and compliance, and real-time data availability for analytics.

- Upgraded IBM DataStage ETL jobs to PySpark, achieving a scalable framework for big data processing and reducing job runtimes
- Successfully migrated Oracle Exadata to AWS RDS using encrypted Snowball Edge, enhancing data security and reducing operational costs.
- Implemented AWS DMS with CDC for Redshift, enabling live data feeds and supporting a 20% increase in analytics reporting speed.
- Configured and managed cloud networking components including VPCs, DNS, load balancers, and firewalls to ensure secure and efficient network operations.

- Designed and developed reusable Terraform modules for provisioning AWS resources, which standardized and accelerated the deployment of cloud infrastructure across multiple projects, ensuring best practices and compliance with security policies.
- Designed and implemented scalable microservices using Golang, enhancing system performance and maintainability.
- Architected and optimized event-driven microservices architectures utilizing Amazon MSK(Kafka), ensuring robust and scalable communication between distributed services, which improved system reliability and reduced downtime
- Designed and optimized data models for batch processing workflows, leveraging tools like AWS Glue and PySpark to enhance data integration and transformation processes.

DevOps and Infrastructure Automation

Led a technical team in automating infrastructure across multi-account AWS environments, streamlining IAM permissions, and establishing compliance-driven guardrails. The infrastructure automation and strict compliance adherence directly supported an improvement in deployment times and a notable increase in security incident detection. Worked closely with legal, forensics, Risk Office, engineering, Security and other key cross-functional teams to understand organizational priorities and sequence project accordingly.

- Orchestrated a Control Tower multi-account environment, achieving integrated access management with Microsoft AD and AWS SSO, optimizing user provisioning. Deployed Permission sets (IAM Policies) for different user Groups. Implemented robust cloud security measures and compliance-driven guardrails (Preventive/Detective).
- Developed and validated a DevOps pipeline with CloudFormation, resulting in faster rollout of infrastructure changes with ensured compliance.
- Orchestrated DevOps practices, including the automation of CI/CD pipelines with Jenkins and AWS CodePipeline, improving deployment efficiency and reliability.
- Crafted Lambda functions for automated risk handling in AWS Security Hub, meeting HIPAA standards and improving threat detection response time.
- Led the deployment and management of Kubernetes clusters within AWS environments to orchestrate containerized applications, improving operational efficiency and system scalability.
- Designed and implemented RESTful APIs and microservices, ensuring seamless integration and communication between distributed systems.
- Utilized monitoring and logging tools (e.g., New Relic, Datadog) to ensure system reliability and performance, proactively identifying and addressing potential issues.
- Experience in hardening Linux environments with tools and practices such as PAM, SELinux, SSHD, and auditd
- Supported production issue resolution, ensuring system stability and performance. Implemented robust monitoring and logging solutions to proactively identify and address potential issues

Data Analytics and Machine Learning

Spearheaded the implementation of AWS Glue and Athena for nightly data jobs and architected a robust AWS SageMaker environment for data science operations, culminating in streamlined data processing, MLOps, and a faster time-to-insight for data analysts. Also managed the seamless lift-and-shift migration of a claims application, ensuring no downtime and maintaining developer workflow continuity.

- Established AWS Glue routines, achieving efficient data organization and cataloging, resulting in an increase in data query performance.

- Configured SageMaker Studio with custom images and private GitHub syncing, providing data scientists with a quicker setup for experimentation.
- Deployed AWS SageMaker to streamline MLOps workflows, enabling data scientists to create, train, and deploy machine learning models at 30% higher efficiency.
- Coordinated claims application migration with precision, resulting in zero downtime and maintaining all the feature parity post-migration.
- This strategic initiative provided a seamless data pipeline, improved query execution times, and supported advanced analytics capabilities across diverse cloud platforms.
- Deployed and managed Apache Airflow on AWS ECS, utilizing Fargate to ensure serverless operation, which minimized the operational overhead and scaled automatically according to the workload.
- Designed and developed APIs to enable seamless integration between various systems and applications, enhancing the efficiency of data operations and real-time data pipelines.

Web Development

Developed a secure, intuitive web portal to facilitate employee access to historical payslip information amid a transition from PeopleSoft to Workday. This solution provided continuity of service for HR operations and maintained high satisfaction rates among employees during a critical changeover period.

- Created an AWS Amplify and React-based web portal, enabling seamless payslip access during a critical HRIS migration.
- Implemented a Node.js Lambda solution with API Gateway, achieving robust data retrieval from legacy systems.
- Integrated AWS Cognito for authentication, ensuring secure and compliant employee access and protecting sensitive payroll data

Online Courses & Certifications

- Certified AWS Solutions Architect - Associate (March 2019 to March 2022) - AWS
- AWS Knowledge - Architecting by AWS (Feb. 2024) - AWS Badge
- Python by HackerRank (Feb. 2022) - HackerRank

Education

MS Computer Science

New York Institute of Technology

Manhattan NY, USA 2023-2025

B.Tech in Mechanical Engineering

Rajasthan Technical University

Jaipur RJ, India

2012-2016

Skills

- Cloud: Amazon Web Services(AWS), Microsoft Azure, Google Cloud Platform(GCP)
- Cloud Services: S3, Ec2, Api Gateway, RDS, Lambda, CloudFront, CloudWatch, Cloudtrail, Glue, Athena, Kinesis, Sagemaker, OpenSearch, AppStream, Appsync(GraphQL), DynamoDB, Step Functions, Amazon FSx, Redshift, Big Query, Azure Data bricks, AKS, EKS, ECS, ECR, Service Catalog, Database Migration Service(DMS), Datasync, AWS Storage Gateway, SNS, SQS, Code Deploy, Code Build, CodePipeline, Azure Databricks, Azure DevOps, Microsoft AD, BigQuery, AKS, Snowflake

- DevOps Tools: Ansible, Chef, Docker, Kubernetes, Jenkins, Github Actions, Spinnaker
- Programming Languages: Python, Golang, NodeJs, Java, TypeScript, Scala
- Framework: Django, Flask, Expressjs, React, Apache Spark
- Database Management: MySQL, PostgreSQL, MongoDB, DynamoDB
- Infrastructure as Code (IaC): Terraform, CloudFormation, SAM, Serverless, AWS CDK
- Machine Learning: Amazon Sagemaker, Pytorch, Pandas, Numpy, scikit-learn, Amazon Bedrock