***Jasika Sethi***

Email - [jasikasethi@gmail.com](mailto:jasikasethi@gmail.com)

Phone - (857) 300-9591

[Jasika Sethi | LinkedIn](https://www.linkedin.com/in/jasika-sethi-12239a107/)

***Professional Profile***

Experienced Cloud Engineer with over 8 years of expertise in managing and optimizing AWS cloud infrastructure, virtual environments, and enterprise software solutions. Proficient in **AWS services, cloud migration, security configurations, and system monitoring**. Skilled in data analysis using **SQL, Python (Pandas, NumPy), and data visualization tools (Tableau, Power BI).** Adept at collaborating with cross-functional teams to enhance cloud environments, drive performance improvements, and ensure seamless service delivery. Strong problem-solving abilities with proven success in CI/CD automation and cost optimization within AWS ecosystems.

***Technical Skills***

* **Programming Languages**: Python, R, SQL

**Data Analysis & Integration**:

* **Tools**: AWS Glue, Amazon Redshift, Amazon Athena, Amazon Quick Sight, Amazon EMR
* **Techniques**: Data Cleaning and Preprocessing, Exploratory Data Analysis, Feature Engineering, Machine Learning Algorithms, Statistical Analysis

**Databases & Data Warehousing**:

* **Databases**: SQL Server, MySQL, Snowflake, Redshift

**Data Warehousing**: AWS Redshift, Amazon RDS, Amazon Aurora

**Data visualization tools**: Tableau (including R integration), Power BI (server setup, data gateway management, custom visuals), Google Data Studio

**Cloud Platforms & Virtualization**:

* **Cloud Platforms**: AWS, Azure, Google Cloud Platform (GCP)
* **Virtualization**: VMware, Hyper-V

**Security & Compliance**: Expertise in IAM, VPN configurations, cybersecurity practices, audit support

**System Monitoring & Optimization**: AWS CloudWatch, Nagios

**Project Management & Methodologies**: Agile/Scrum, Jira, Adobe Workfront

* **Networking Concepts**: TCP/IP, HTTP/s, DNS, OSI model, firewalls
* Collaborated with organizations to design and implement cloud infrastructure solutions, optimizing performance and cost-efficiency, ensuring security compliance, and documenting processes and best practices.

***Relevant Experience***

**Cloud Data Engineer** ***Massachusetts General Hospital, Boston, MA***

*January 2021 – April 2024*

* Built and administered scalable, secure, and high-performing cloud environments using AWS and Azure for various enterprise applications. Utilized key services like **AWS EC2 for computing, AWS S3 for storage, and RDS for databases. Implemented serverless architectures with AWS Lambda** to streamline operational tasks and improve efficiency across both cloud platforms.
* Designed detailed architecture diagrams using **draw.io** to visually represent infrastructure workflows, data flows, and security layers.
* Spearheaded the migration of **data warehouses to AWS Redshift**, enhancing data processing speed by 20% and reducing storage costs by 30%. Leveraged **AWS Glue** for seamless data extraction, transformation, and loading (ETL) during migration. Maintained secure and efficient data pipelines using **AWS Data Sync** to ensure data consistency and real-time synchronization across environments.
* Developed a robust, **high-availability database architecture using AWS RDS, Amazon Aurora, and Amazon DynamoDB**. Optimized data flows with **AWS Glue** for ETL processes and ensured data consistency. Balanced workloads, improving scalability and operational efficiency, while reducing costs by optimizing resource usage.
* Created **Python-based AWS Lambda** functions to automate workflows, including real-time file processing in **S3, SNS notifications, and Amazon RDS backups.** This reduced manual interventions and enhanced system efficiency.
* Automated **SQL query execution on AWS Athena using Python’s boto3 library** for large-scale data analysis. Integrated query results with **AWS Glue Data Brew** to prepare and cleanse data for further reporting and analytics.
* Developed **AWS CloudFormation templates using Python**, automating the provisioning of critical cloud infrastructure, including Amazon RDS, Aurora, DynamoDB, and Redshift. Reduced deployment time by 50% and ensured consistent configurations across multiple environments.
* Configured and managed **AWS IAM policies, roles, and user profiles** for secure access across various services. **Integrated single sign-on (SSO) and multi-factor authentication (MFA)** using Duo and Microsoft Authenticator, ensuring robust security controls.
* Configured and optimized **networking components** like **VPNs and AWS Direct Connect** for secure and efficient migration of on-premises data centers to cloud environments. Ensured seamless connectivity and data synchronization between cloud and on-premises infrastructure using **AWS Data Sync**.
* Utilized **AWS CloudTrail and CloudWatch** for comprehensive monitoring, auditing, and system security. Ensured compliance and system integrity through continuous monitoring and implemented disaster recovery and high-availability strategies using **AWS Route 53 and Elastic Load Balancer (ELB)** to guarantee uptime.
* Automated infrastructure deployment with AWS CloudFormation and collaborated with DevOps teams to **build CI/CD pipelines using AWS Code Pipeline and Code Deploy**. This led to faster and more reliable software releases.
* Implemented CI/CD pipelines using SaaS services like **GitHub and GitHub Actions** to automate testing, integration, and deployment, enhancing deployment speed and reducing manual intervention.

**Cloud Consultant *Citizens Bank, Westwood, MA***

*September 2020 – November 2020*

* Conducted a comprehensive review of **AWS and Azure environments**, focusing on **IAM policies, Active Directory integration, and permissions management** to identify optimization opportunities. Developed strategies for improving both **security and operational efficiency** by **adjusting IAM roles, AD group policies, and Azure Active Directory (AAD) settings.**
* Applied **AWS optimization strategies**, including adjusting **EC2 instance types**, using **AWS Cost Explorer for cost analysis, and optimizing S3 storage**.
* Led the configuration of **AWS IAM roles and Azure RBAC**, enforcing least-privilege access principles to protect sensitive financial data. Reviewed permissions management in **NAS and SharePoint**, ensuring that only authorized personnel could access critical banking data, which significantly improved data security compliance.
* Strengthened security measures by implementing **single sign-on (SSO)** for seamless access across cloud platforms and on-premises environments. Combined SSO with **multi-factor authentication (MFA)** to ensure secure access for employees working across different geographic locations. This resulted in enhanced security controls and smoother **access management for over 500 employees**.
* Designed and implemented cloud-native architectures and **containerized microservices** using **Docker and Kubernetes, enabling more agile deployments.**This required clear communication and close collaboration with stakeholders to align security and cloud optimization goals with business needs.

**Business Intelligence Analyst *Sati Enterprise, India***

*August 2016 – March 2018*

* Gathered and documented customer requirements using **Agile methodologies, translating business needs into BI and data solutions technical specifications.**
* **Developed complex SQL queries and used Python libraries such as Pandas and NumPy** for data manipulation and transformation, streamlining data processing and enhancing the accuracy of insights displayed in Tableau and IBM Cognos dashboards.
* Automated data extraction and loading workflows using **Python scripts**, integrating data from various sources and ensuring real-time updates for business reports.
* Conducted **ad-hoc analysis and User Acceptance Testing (UAT) using Python** to validate data models, ensuring consistency in reporting and dashboards.

**Data Quality Analyst *Larsen & Toubro, India***  
 August 2014 – May 2016

* Designed and executed **data quality testing plans**, maintaining data integrity across systems.
* Utilized **Python** for automating data validation processes and implementing data quality checks. **Developed scripts using Pandas to perform data cleaning, normalization, and consistency checks** across multiple data sets.
* Employed **SQL and Python to conduct root cause analysis of data issues, developing Python-based tools to monitor data quality and generate exception reports.**
* Used **Python's Matplotlib and Seaborn for data visualization**, providing management with clear insights into data quality trends and improving decision-making.
* Improved data integrity by building automated **Python scripts** to monitor real-time data streams and trigger alerts for data anomalies, significantly enhancing the reliability of system performance.

***Education***

**Master of Professional Studies in Analytics** *Apr 2018 – Dec 2019*

*Northeastern University, Boston, MA*

**Master of Arts in Economics** *Aug.2014 – May 2016*

*Punjab University, India*

**Bachelor's Degree in Applied Economics** *Jun 2011 – May 2014*  
 *Sadar Patel University, India*