Dishant Modh

dishantmodh7@gmail.com +91 70696 01010 dhmodh Dishant Modh

Summary

Results-driven **Site Reliability Engineer & Database Administrator** with **3.8+** years of experience **streamlining** cloud infrastructure, database performance, and cost efficiency across large-scale, distributed systems. Demonstrated success in improving query performance by up to **50%**, enhancing availability through **mechanized** multi-region DR solutions, and achieving over **$100K** in annual AWS cost savings via RDS and EC2 optimization. Skilled in PostgreSQL, Aurora, MySQL, MongoDB, Cassandra, Snowflake, and Oracle, with strong focus on performance tuning, replication, and capacity planning, and experienced in implementing Terraform-based IaC, automating CI/CD pipelines, and deploying observability frameworks using Datadog, Grafana, and CloudWatch.

Experience

Software Engineer (Site Reliability Engineering(DBA)) – GlobalLogic Bengaluru | Feb **2024** – Present

- Manage and optimize PostgreSQL, Aurora, MySQL, MongoDB, Cassandra, and Snowflake clusters supporting global workloads.
- Designed and implemented multi-region DR with Aurora Global Database & AWS DMS, achieving near-**zero** RPO and sub-minute RTO.
- **Systematized** RDS provisioning, monitoring, and backups via Terraform + GitHub Actions, reducing deployment time by **40%**.
- Implemented storage tiering, right-sized EC2 instances, and **enhanced** RDS instance classes, cutting cloud costs by **$100K**/month.
- Built AWS Lambda + CloudWatch automation for failover validation and log cleanup, freeing **10+** engineer hours per week.
- Deployed centralized Datadog + Grafana observability dashboards, cutting MTTR by **30%**.
- Optimized MongoDB aggregation pipelines and Cassandra data modeling, cutting query response times by up to **45%**.

Software Engineer (Database Administrator) – HHAeXchange Ahmedabad | Dec **2021** – Feb **2024**

- Administered **100+** production PostgreSQL, MySQL, Cassandra, and Oracle databases maintaining **99.99%** uptime.
- Engineered advanced PostgreSQL query optimization and index tuning, improving read-heavy workloads by **50%** and write throughput by **30%**.
- Identified and remediated inefficient query plans, vacuum operations, and slow I/O patterns using pg_stat_statements and EXPLAIN ANALYZE.
- **Automated** replication, partitioning, and maintenance tasks via Python and PowerShell, improving performance by **40%**.
- Migrated on-premises databases to AWS RDS & Aurora with minimal downtime using AWS DMS and pglogical.
- Consolidated redundant AWS DMS tasks and **improved** replication bandwidth utilization, lowering migration costs by **25%**.
- Developed reusable Terraform modules and enhanced CI/CD pipelines (Jenkins, Octopus) for schema management.

Projects

- **High-Availability PostgreSQL Cluster with Patroni and Terraform:** Deployed a highly available, auto-healing PostgreSQL cluster on AWS EC2 using Patroni and managed entirely by Terraform, including automated monitoring via Prometheus/Grafana.
- **ML-Powered Database Anomaly Detection (ML-DBA):** Developed a Python and Scikit-learn model to analyze PostgreSQL metrics and predict performance anomalies (e.g., deadlocks, I/O spikes), reducing proactive investigation time by **60%**.

Technical Skills

Databases: PostgreSQL, Aurora, MySQL, MongoDB, Cassandra, Snowflake, Oracle
Cloud: AWS (EC2, RDS, DMS, Lambda, S3, IAM, CloudWatch), Azure
DevOps Tools: Terraform, Jenkins, Octopus, GitHub Actions, Docker, Ansible
Languages: Python, Go, Bash, PowerShell, SQL
Monitoring & Observability: Datadog, Grafana, Prometheus, CloudWatch, Loki, Alertmanager

Certifications

AWS Solutions Architect – Associate
MongoDB SI Associate
Microsoft Azure Fundamentals (AZ-900)
GitHub Foundations

Education

B.Tech in Information Technology **2018 – 2022**
Dharmsinh Desai University, Nadiad