Sumeet K Shukla

Senior Database Reliability Engineer & Cloud Architect

CONTACT

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- Indian
- English, Hindi, Tamil

SKILLS SET

Database Engineering & Operations

PostgreSQL (Primary), AWS RDS & Aurora, GCP CloudSQL & AlloyDB, MySQL, MongoDB, Amazon Redshift | Performance Tuning & Query Optimization, High Availability & Disaster Recovery, Replication & Scaling, Security & Compliance, Large-Scale Migrations, Capacity Planning

Cloud Infrastructure, DevOps & Automation

AWS (EC2, S3, VPC, CloudWatch, IAM), GCP | Kubernetes, Kustomize, Helm Charts, Docker, AWS ECR | Infrastructure as Code (Terraform, Packer) | CI/CD (GitHub Actions, CircleCI) | SQL, Python, Bash, YAML, JSON

Database Tools & Administration

Flyway, pgAdmin, pgBadger, pgRepack, pgPool, pgAudit, pgBench, Foreign Data Wrappers, PEM, dBeaver

Observability & Monitoring

Datadog, New Relic, Splunk, Nagios, SolarWinds, Honeycomb

PUBLICATIONS

- AWS Aurora RDS load balancing with pgPool-II
- Terraform AWS RDS Cluster: Open-Source Contribution
- PostgreSQL Architecture Deep Dive
- pgBadger for PostgreSQL on Linux
- Normalization in OLTP vs. OLAP
- Signs You've Truly Solved a Database Administration Problem

PROFESSIONAL SUMMARY

Senior Database Reliability Engineer with 15+ years architecting and scaling mission-critical PostgreSQL platforms for high-growth, global organizations. Proven track record of delivering multi-million-dollar infrastructure optimizations, achieving 99%+ performance improvements, and sustaining >99.95% platform availability across distributed cloud environments. Deep technical expertise in zero-downtime migrations, enterprise HA/DR strategies, and advanced performance tuning, combined with strategic leadership in building high-performing DBA/SRE teams and driving operational excellence through automation-first philosophies. Core competencies span the full database lifecycle: cloud-native architecture (AWS, GCP), Infrastructure as Code (Terraform, Packer), container orchestration (Kubernetes, Helm, Docker), and comprehensive observability (Datadog, New Relic, Splunk). Recognized for transforming database operations from reactive firefighting to proactive, governed platforms aligned with business objectives—implementing SLAs, runbooks, CI/CD pipelines, and OKRs that enable rapid scaling while maintaining 24×7 reliability. Active contributor to the PostgreSQL community with published work on architecture, performance optimization, and cloud database strategies.

EXPERIENCE SUMMARY

Senior Database Reliability Engineer
Inspectorio Inc., India   *Mar 2025 – Present*

- Own GCP Cloud SQL & AlloyDB reliability and scalability across 25+ production PostgreSQL instances, sustaining >99.95% availability.
- Delivered up to 99% query execution improvement and ~90% latency reduction through deep SQL rewrites, advanced indexing, bloat remediation, and memory/server-level tuning.
- Built automation-first DB platform using Terraform, Kubernetes, and Kafka, enabling safe migrations, repeatable operations, and rapid product scaling.

Lead Database Reliability Engineer
Hexaware Technologies, India   *Feb 2024 – Mar 2025*

- Led enterprise platform transitions and steady-state ownership across PostgreSQL, Snowflake, and SnapLogic on AWS, ensuring zero critical outages during vendor handovers.
- Built and mentored DBA/DBRE teams while establishing Terraform-driven IaC, governance standards, SOPs, SLAs, and runbooks for consistent enterprise delivery.

Principal PostgreSQL Database Reliability Engineer
Independent Consulting, India   *Mar 2022 – Feb 2024*

- Delivered PostgreSQL platform architecture, migrations, performance engineering, and automation across multiple production clients.

Senior Site Reliability Engineer (Database Platforms)
Talabat (Delivery Hero Group), Dubai, UAE   *Mar 2019 – Feb 2022*

- Owned AWS RDS & Aurora platforms at scale, designing HA/DR, capacity planning, and governance for high-traffic, consumer-facing workloads.
- Architected Terraform-based infrastructure and standardized database provisioning, eliminating environment drift and enabling rapid regional expansion.
- Integrated Kubernetes-aware operational models with monitoring, access controls, and incident processes, reducing MTTR and improving platform reliability during peak demand.

Senior Database Administrator
Optum (UnitedHealth Group), Chennai, India   *Apr 2017 – Mar 2019*

- Led enterprise PostgreSQL and MySQL platforms, delivering up to 150% performance improvement through advanced tuning, HA/DR architecture, and capacity planning.
- Owned end-to-end database lifecycle operations—including security, backup, compliance, and automation—supporting mission-critical healthcare systems with high reliability.

PostgreSQL Database Administrator
Aricent Technologies (Cisco EMaaS), Bangalore, India   *Aug 2016 – Apr 2017*

- Administered PostgreSQL platforms for Cisco's cloud EMaaS environment, implementing HA/DR, monitoring, automation, and proactive performance tuning.

EARLIER EXPERIENCE

🚀 Founder & Director
ThoughtBirds Technologies LLP, India *Nov 2013 – Jul 2016*

- Founded and led an IT services startup, owning end-to-end PostgreSQL platform delivery, client engagements, automation, and team management across multiple production systems.

🏢 Assistant Systems Engineer
Tata Consultancy Services (TCS), Chennai, India *Jul 2007 – Feb 2010*

- Delivered enterprise BI and reporting operations using Oracle and Business Objects, improving batch reliability, SLA adherence, and financial reporting accuracy.

</> Associate Database Engineer
Xento Systems, Pune, India *Oct 2012 – Oct 2013*

- Supported and optimized production PostgreSQL environments for a high-traffic platform, improving query performance, schema design, and operational reliability.

ACHIEVEMENTS

🏆 Recipient of Extra Miles Awards across multiple organizations for consistently exceeding performance and delivery expectations.

📈 Recognized for driving multi-million-dollar infrastructure cost savings through server optimization, database performance tuning, and large-scale automation initiatives.

⭐ Acknowledged for leading automation and reliability improvements, reducing manual effort and improving operational efficiency across database platforms.

🏢 Successfully founded and operated an IT services startup for over two years, delivering technology solutions and managing clients, teams, and delivery outcomes.

🔄 Introduced process improvements to the Financial Management Reporting (FMR) workflow, resulting in measurable efficiency and reliability gains.

📄 Presented a technical paper on High Voltage Direct Current (HVDC) at a state-level forum.

CERTIFICATIONS

Core DBRE & Cloud Platforms

- AWS Certified Database – Specialty (2024)
- EDB Certified Professional – PostgreSQL 12 (2020)
- EDB Certified Associate – PostgreSQL 12 (2020)
- AWS Certified Solutions Architect – Associate (2019)

Platform Automation & Cloud-Native

- HashiCorp Certified: Terraform Associate (2023)
- Certified Kubernetes Administrator (CKA) (2021)
- Certified Kubernetes Application Developer (CKAD) (2021)

Observability & Delivery

- New Relic Full Stack Observability Practitioner (2024)
- Scrum Fundamentals Certified (2014)
- University of London – A Practical Guide to Managing People at Work (2023)

EDUCATION

🎓 Master of Computer Applications (MCA)
Pune University, Pune
2010 – 2013

🎓 Bachelor of Computer Applications (BCA)
Annamalai University, Chennai
2008 – 2010

⚙ Diploma in Electrical & Electronics Engineering
Central Polytechnic College, Chennai
2004 – 2007

🏫 Matriculation (CBSE Board)
Government Higher Secondary School, Dirang
2004

DETAILED PROFESSIONAL EXPERIENCE

Senior Database Reliability Engineer
Inspectorio Inc.

Mar 2025 – Present
India

› **Platform Ownership & Scale:** Own reliability, performance, and scalability of production-critical, multi-cloud data platforms, supporting 25+ PostgreSQL instances across GCP Cloud SQL & AlloyDB, Kafka, MongoDB, and Elasticsearch.

› **Performance Engineering:** Led deep PostgreSQL optimization initiatives, delivering up to 99% improvement in execution time and ~90% latency reduction through SQL rewrites, advanced indexing, bloat remediation, memory tuning, and server-level optimization.

› **Platform Strategy & Governance:** Provide technical leadership by defining platform standards, roadmaps, and best practices, evolving databases from service-level dependencies into a governed, scalable platform aligned with long-term business goals.

› **Infrastructure as Code (Terraform):** Refactored and modernized Terraform into product-aligned workspaces, eliminating CI/CD bottlenecks, improving deployment reliability, and reducing long-term maintenance risk.

› **Zero-Downtime Operations:** Executed safe, backward-compatible database and Terraform module upgrades with zero production downtime across environments.

› **DB-Ops Automation:** Built end-to-end PostgreSQL automation (health checks, bloat detection, automated reindexing, vacuum/analyze, upgrade preflight checks), significantly reducing manual DBA effort and preventing recurring regressions.

› **Kubernetes Automation:** Designed Kubernetes CronJob–based frameworks to operationalize routine database maintenance and eliminate manual toil at scale.

› **Security, Observability & SLOs:** Drove security hardening and observability initiatives, enforcing SSL-only connectivity, defining SLO-driven operations, and leading blameless incident postmortems as primary incident owner.

› **Cross-Functional Enablement:** Partnered with SRE, Platform, and Product Engineering teams to proactively scale systems, reduce operational risk, and support reliable product growth.

› **Operational Leadership:** Recognized for independent execution, strong documentation, and calm, decisive leadership during high-severity production incidents.

Lead Database Reliability Engineer
Hexaware Technologies

Feb 2024 – Mar 2025
India

› **Platform Transition & Ownership:** Led end-to-end transition, stabilization, and steady-state ownership of enterprise data platforms across PostgreSQL, Snowflake, and SnapLogic on AWS, ensuring zero critical outages during vendor handovers.

› **Team Building & Enablement:** Built, hired, and mentored a high-performing DBA / DBRE team, establishing structured onboarding, knowledge transfer (KT), and operational readiness for large-scale enterprise clients.

› **Cloud-Native Operating Model (IaC):** Designed and implemented AWS- and Terraform-based Infrastructure as Code to standardize provisioning, enable repeatable environments, and reduce operational risk.

› **Governance & Operational Excellence:** Established platform governance, SLAs, SOPs, and runbooks, improving support quality, reducing incident recurrence, and enabling reliable long-term service delivery.

Senior Site Reliability Engineer (Database Platforms)
Talabat (Delivery Hero Group)

Mar 2019 – Feb 2022
Dubai, UAE

› **Database Platform Strategy & IaC:** Architected and operated global-scale AWS RDS and Aurora platforms using Terraform and Packer, enforcing Infrastructure as Code as the source of truth, eliminating environment drift, and standardizing regional deployments.

› **Cloud Scale & Security:** Managed a large fleet of RDS and Aurora instances, optimizing performance and security via VPC design, subnets, NACLs, and security groups for high-traffic, consumer-facing workloads.

› **Availability & Resilience (HA/DR):** Designed and executed enterprise-grade HA/DR frameworks, led migrations from legacy RDS to Amazon Aurora, and regularly conducted DR exercises, restoring full infrastructure within <2 hours.

› **Migration & Modernization:** Led critical database migrations, including on-prem SQL Server to PostgreSQL on AWS, delivering up to 200% performance improvement through architecture redesign and tuning.

› **Performance Engineering & Observability:** Built a comprehensive observability stack using CloudWatch, SNS, RDS Performance Insights, and New Relic, driving proactive query tuning and converting incidents into permanent platform hardening.

› **Release Engineering & CI/CD:** Implemented database CI/CD with Flyway, enabling faster, safer schema deployments; partnered with DevOps to reduce release time via CircleCI, Docker, AWS ECR, and GitHub automation.

› **Operational Automation:** Built Kubernetes- and script-based automation using Helm, shell scripting, pgBadger and pgRepack, eliminating manual DBA toil and standardizing routine maintenance.

› **Incident Management & Developer Enablement:** Defined on-call and incident processes using OpsGenie and PagerDuty, led RCAs, and enabled engineers through SQL best practices and schema design guardrails, preventing performance debt early.

Senior Database Administrator
Optum (UnitedHealth Group)

Apr 2017 – Mar 2019
Chennai, India

> **Team Leadership & Operations:** Led and mentored a team of PostgreSQL and MySQL DBAs, driving operational excellence and reliability across multiple production environments.

> **Platform Health & Architecture Assessment:** Conducted comprehensive infrastructure and performance health reviews on onboarding, identifying systemic bottlenecks and remediation priorities.

> **Performance Engineering:** Delivered up to 150% performance improvement on PostgreSQL workloads and ~70% improvement on MySQL systems through OS-level tuning, configuration optimization, and query enhancements.

> **Platform Lifecycle Ownership:** Owned the end-to-end lifecycle of PostgreSQL and MySQL platforms, including installation, upgrades, configuration, replication, and ongoing maintenance.

> **Capacity, HA & DR Strategy:** Designed and implemented capacity planning, high-availability, and disaster-recovery architectures to meet enterprise reliability and compliance requirements.

> **Security, Backup & Compliance:** Partnered with engineering and business stakeholders to define robust backup, recovery, and database security strategies aligned with healthcare compliance needs.

> **Cloud & Automation Enablement:** Worked with AWS RDS and Aurora, automating routine database operations and integrating FDWs to improve operational consistency and efficiency.

> **Multi-Engine Support:** Provided cross-platform database support (PostgreSQL, MySQL, SQL Server, MongoDB) to meet evolving application and business requirements.

PostgreSQL DBA
Cisco (Aricent Technologies)

Aug 2016 – Apr 2017
Bangalore, India

> **Platform Operations & Reliability:** Installed, configured, replicated, and maintained PostgreSQL databases supporting Cisco's cloud-based EMaaS platform, ensuring availability and operational stability.

> **High Availability & DR:** Implemented PostgreSQL HA/DR architectures to maintain service continuity and meet enterprise reliability expectations.

> **Backup, Security & Compliance:** Planned and executed database backup, recovery, and security strategies aligned with Cisco enterprise standards.

> **Performance Engineering:** Tuned PostgreSQL server parameters & configs for scalable production workloads.

> **Monitoring & Tooling:** Implemented and managed monitoring and administration tooling including Nagios, pgBadger, pgAdmin, pgPool-II, PEM, and OPM, enabling proactive issue detection.

> **Proactive Health Management:** Conducted regular database health checks and resolved performance and stability issues before customer impact.

> **Automation & Efficiency:** Automated routine DBA operations using shell scripting, improving operational consistency and reducing manual effort.

> **Container & Ecosystem Exposure:** Supported containerized environments using Docker and gained foundational exposure to MongoDB administration.

Founder Director
ThoughtBirds Technologies LLP

Nov 2013 – Jul 2016
Pune, India

> **Founder Leadership & Business Ownership:** Co-founded and led an IT services startup, owning the full lifecycle from client acquisition and commercial negotiations to solution architecture, delivery, and long-term support across multiple engagements.

> **Database Platform Engineering:** Designed, deployed, and operated PostgreSQL environments end to end, including installation, configuration, performance tuning, and ongoing production operations.

> **Reliability, Backup & Security:** Planned and implemented backup, recovery, and security strategies to ensure data integrity and service continuity.

> **Automation & Operational Efficiency:** Automated routine operational workflows using shell scripting, reducing manual effort and improving delivery efficiency.

> **Change & Release Management:** Coordinated upgrades, patches, and production changes with technical teams to ensure safe and predictable system evolution.

> **Performance Optimization:** Optimized WordPress & Magento platforms through DB tuning, app config, and infrastructure improvements.

> **Cloud & Big Data Exposure:** Built hands-on experience across AWS and big-data ecosystems (Hadoop, HDFS, Hive, HBase, Sqoop, Flume, Zookeeper), expanding architectural breadth beyond OLTP systems.

> **Application & Web Engineering:** Led the design and development of web applications using PHP, JavaScript/jQuery, HTML/CSS, and CMS platforms (WordPress, Magento).

> **Agile Delivery & Execution:** Implemented Scrum-based delivery to improve planning, execution, and team collaboration.

> **People Management & Team Building:** Recruited, trained, and managed a cross-functional team of 4 engineers, developing early leadership and people-management capabilities.

Associate Engineer
Xento Systems Pvt. Ltd

Oct 2012 – Oct 2013
Pune, India

- **Production Support & Reliability:** Supported production and non-production PostgreSQL environments, resolving live database issues in close collaboration with application developers.
- **Environment Operations:** Monitored and managed PostgreSQL databases across development and staging, ensuring availability and operational stability.
- **Schema & Data Management:** Created and maintained database schemas, users, and objects to support evolving application requirements.
- **Backup & Recovery:** Performed database backup and restoration activities to ensure data integrity and recoverability.
- **Query Performance Optimization:** Optimized and tuned SQL queries, improving application performance and query efficiency.
- **Application Collaboration:** Contributed to development of PHP/HTML/CSS/jQuery-based web applications supporting a rental business platform.

Assistant System Engineer
Tata Consultancy Services

Jul 2007 – Feb 2010
Chennai, India

- **Enterprise Reporting & BI Delivery:** Developed and delivered enterprise reports using Business Objects (DeskI, WebI XIR2) and Crystal Reports XIR2 for financial applications including FARS and RPS.
- **Batch Processing & Operations:** Managed daily and periodic batch reporting workflows, ensuring successful job execution, file generation, and secure FTP delivery to business users.
- **Financial Reporting Operations:** Delivered daily PFADAV, weekly premium, and monthly marketing allowance reports, ensuring data accuracy and timely availability for stakeholders.
- **Process Optimization:** Improved FARS and RPS monthly reporting workflows, reducing end-to-end processing time by ~50% through operational and process enhancements.
- **Data Validation & Quality Control:** Compiled, validated, and reconciled marketing allowance totals prior to distribution, ensuring reporting accuracy and compliance.
- **Production Support & SLA Management:** Handled production incidents and service requests across BI tools (Business Objects, Crystal Reports, Oracle Reports, SQL), resolving issues within defined SLAs.
- **Monitoring & Incident Resolution:** Performed daily batch monitoring, break-fix analysis, report enhancements, and regression testing to maintain reporting stability.
- **Tooling & Automation:** Built a custom MS Access–based tracking tool to manage service requests and work requests before adoption of BMC Remedy.
- **Documentation & Knowledge Transfer:** Documented end-to-end reporting processes for FARS and RPS systems and provided KT to new joiners on business workflows and reporting modules.
- **Stakeholder Collaboration:** Worked closely with end users to diagnose issues, communicate resolutions, and provide regular operational updates.