KAL GADDA

ENGINEERING LEADER (SRE | Quality | AIOps | DevOps)

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PROFESSIONAL SUMMARY

Strategic Quality Engineering Leader and Site Reliability Engineering expert with 15+ years of progressive experience delivering enterprise-scale reliability solutions. Proven expertise leading cross-functional teams, driving automation transformation, implementing modern SRE practices including observability, incident management, and reliability metrics. Expert in aligning engineering excellence with business objectives while building high-performing teams and delivering measurable improvements in system reliability, availability, and operational efficiency.

CORE COMPETENCIES

- Quality Engineering Leadership & Strategy.
- Site Reliability Engineering & Observability.
- Test Automation & CI/CD Pipeline Integration.
- Performance testing of web apps, microservices, and REST APIs.
- Incident Management & Post-Mortem Analysis.
- Cloud Infrastructure & Platform Reliability.
- Cross-Functional Team Leadership & Mentoring.
- Monitoring, Alerting & Performance Optimization.
- Scaled Agile Framework (SAFe 6) Implementation.
- Executive Stakeholder Communication.

TECHNICAL SKILLS

SRE & Observability: Datadog, New Relic, Prometheus, Grafana, Splunk, PagerDuty, AppDynamics.

Machine Learning & Data Science: Scikit-learn, NumPy, Pandas, Matplotlib, Seaborn.

Modeling Techniques: Regression, Decision Trees, Ensemble Learning, Clustering.

PROFESSIONAL EXPERIENCE

Senior Manager, Site Reliability Engineering
PWC US | Tampa, FL | March 2023 – Present

Drive enterprise-wide site reliability engineering strategy and implementation for PwC's digital transformation initiatives. Lead observability, automation, and reliability engineering practices across multi-cloud environments supporting critical business applications. Manage annual budget of $3M covering team, tooling, and infrastructure.

- Built and scaled SRE team from 4 to 10 engineers through strategic hiring and structured onboarding programs, establishing technical career progression frameworks that resulted in 95% retention rate and 3 internal promotions.
- Architected and deployed a comprehensive SRE technical roadmap for Data Platform, establishing incident response, observability, automation, and reliability frameworks that scaled across the organization.
- Coordinated cross-functional teams to implement SRE best practices organization-wide, mentoring engineers in reliability engineering and AI-first methodologies that influenced enterprise-wide adoption of modern standards.
- Operationalized predictive reliability practices including chaos testing, resilience modeling, and AI-assisted failure analysis, reducing high-severity incidents by 25% YoY through proactive prevention before user impact.
- Deployed AI-powered anomaly detection and self-healing automation systems, achieving auto-remediation of 70%+ of recurring issues, reducing MTTR by 35%, and eliminating manual intervention across critical services.
- Designed integrated observability frameworks spanning logging, monitoring, and alerting tailored to portfolio needs.
- Deployed firm-wide observability strategies integrating open-source telemetry (Kiali, Jaeger) with Datadog across AKS services. Implemented AI-driven capacity forecasting, optimizing infrastructure costs by $5.6M annually and enhancing customer transparency.
- Automated end-to-end deployment of monitoring dashboards and alerting rules via Terraform, eliminating manual configuration.
- Incorporated AI-based anomaly detection for dynamic threshold tuning, reducing false positives by 40% and ensuring version-controlled, repeatable observability deployments.
- Engineered automated Datadog agent deployment across all Kubernetes clusters organization-wide, also adopted AI-driven self-healing workflows to eliminate hundreds of manual interventions for redundant incidents.
- Designed a universal transaction tracking framework using correlation IDs for seamless service traceability. Integrated AI-assisted log correlation, reducing incident diagnosis time by 30%.

Analytics: EDA, Statistical Analysis, Feature Engineering.

Testing Tools: Selenium WebDriver, Robot Framework, Rest Assured, PACT, SOAP UI, Postman, JMeter, Blazemeter, LoadRunner.

Infrastructure & IaC: Terraform, CloudFormation, Ansible, Docker, Kubernetes.

CI/CD & Version Control: Jenkins, GitHub Actions, Azure DevOps, Git, GitLab CI.

Programming Languages: Python, JavaScript, TypeScript, Bash, PowerShell, HTML, XML.

Databases: MySQL, PostgreSQL, SQL Server, MongoDB, Redis.

Cloud Platforms: AWS, Azure, GCP, Apache Tomcat, WebLogic.

AI/ML PROFILE

Post Graduate Program in Artificial Intelligence and Machine Learning (Business Applications) – UT Austin

Hands-on experience applying machine learning, statistical analysis, and Python-based data science techniques to solve real-world business problems, build predictive models, and deliver actionable business insights.

EDUCATION & CERTIFICATION

- Post Graduate Program in AI & ML (Business Applications) – UT Austin
- University of Denver Fullstack Bootcamp
- Certified SAFe Product Owner / Product Manager
- Bachelor of Mechanical Engineering

- Executed chaos, stress, and endurance testing across microservices using AI-based pattern recognition to refine alerts and re-engineer SLOs, minimizing toil while driving actionable insights.
- Introduced Helm for observability infrastructure deployments and decoupled functional vs. infrastructure changes, reducing deployment-related incidents by 20% and accelerating delivery velocity.
- Developed observability and infrastructure cost optimization framework, reducing vendor expenditures (Datadog, Azure Log Analytics, Splunk) by $2M+.
- Implemented advanced capacity planning models for Cloudera (NiFi), AKS, and data platforms using AI-enhanced real-time and historical data to proactively right-size infrastructure and prevent performance bottlenecks.
- Automated least-privilege RBAC audits ensuring compliance with security best practices and preventing access control oversights.
- Establish SRE best practices including SLI/SLO/SLA frameworks, error budgets, and reliability targets, improving overall system availability from 99.5% to 99.9%.
- Lead incident management transformation implementing blameless post-mortems, automated incident response playbooks, and proactive monitoring strategies, reducing MTTR by 45%.
- Drive infrastructure automation using Terraform and Helm across enterprise Azure workloads, standardizing deployment practices and reducing infrastructure provisioning time by 60%.
- Implement chaos engineering practices and load testing frameworks validating system resilience under failure scenarios and peak traffic conditions.
- Partner with DevOps teams to optimize CI/CD pipelines integrating automated testing, security scanning, and progressive deployment strategies.
- Mentor team of 10 site reliability and observability engineers through bi-weekly 1:1s, quarterly performance reviews, and personalized development plans aligned with career aspirations.
- Provide strategic guidance to senior leadership on reliability investments, risk mitigation, and operational excellence initiatives.

Senior Manager, Software Development
CHARTER COMMUNICATIONS | Denver, CO | January 2019 – March 2023

Led quality engineering initiatives for enterprise-scale telecommunications platform serving 8M+ customers. Directed 30+ member cross-functional engineering team implementing comprehensive QA and reliability systems. Managed annual budget of $5M.

- Transformed QE automation, increasing automated coverage from 0% to over 50% across six router hardware platforms, reducing regression cycle time and improving release velocity.
- Implemented shift-left testing and quality governance, reducing production incidents by 30% through earlier defect detection and improved release readiness.
- Built and managed automated test labs using Robot Framework integrated with CI/CD, supporting continuous execution and rapid feedback.
- Applied SRE principles including SLI/SLO/SLA monitoring, synthetic

testing, and proactive incident response to enhance service stability.

- Produced executive-level quality reporting with actionable insights to inform roadmap priorities.
- Performance Testing / Engineering: Led performance testing for web applications, microservices, and REST APIs; designed workload models and scenarios aligned with production usage patterns.
- Executed load, stress, and endurance tests using JMeter and LoadRunner, analyzed results to identify bottlenecks, and collaborated with engineering teams for root-cause analysis and remediation.
- Supported NFR validation by incorporating performance criteria into release readiness and risk-based test strategy, improving confidence for high-traffic releases.
- Utilized monitoring and telemetry tools (Splunk, AppDynamics, Datadog) to correlate test results with system behavior and accelerate performance issue triage.
- Contributed to capacity planning and infrastructure optimization through trend analysis and performance baselining.

Senior Quality Engineer / QE Consultant
COGNIZANT TECHNOLOGIES LTD. | Denver, CO | 2016 – 2019

- Consulted on quality engineering projects for Fortune 500 clients across telecommunications, education, and enterprise sectors.
- Developed and executed end-to-end testing strategies for a multi-device educational platform, creating scalable Selenium automation using the Page Object Model (POM) for improved maintainability.
- Produced executive dashboards and quality metrics reporting (defect trends, release readiness indicators) to enhance stakeholder visibility and support decision-making.
- Led QA release planning, test execution, and regression strategies for large-scale rollouts, including a national retail footprint.
- Implemented risk-based testing to focus on critical user journeys and business workflows.
- Performance Testing / Engineering: Designed and executed performance and load tests for web applications, microservices, and REST APIs, including test planning, NFR gathering, benchmarking, and reporting. Developed and maintained performance test assets using tools such as JMeter, LoadRunner, SOAPUI, Postman, and Swagger, supporting repeatable execution in CI/CD-aligned workflows where applicable.
- Performed bottleneck analysis and coordinated cross-functional triage using monitoring and log insights from Splunk, AppDynamics, Dynatrace, and Datadog to accelerate root-cause identification.
- Supported capacity planning by analyzing production logs and traffic patterns, translating findings into performance test scenarios and actionable recommendations.

Quality Engineer & QA Lead
INFOSYS TECHNOLOGIES LTD. | Various Locations | 2007 – 2016