**SANJAI KANIANCHALIL**

Novi, MI 48374

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**DIRECTOR – CLOUD OPERATIONS, DEVOPS, SRE, QA/TEST**

Dynamic, result-oriented, customer-focused, hands-on Software Engineering Leader with wide experience in DevOps, Infrastructure, and QA/Test in mobile/embedded, automotive, IOT and wireless industries. Adept in leveraging engineering management, operational expertise, and collaboration for excellence. Technical expertise spans Cloud/AWS, Data Analytics, Machine Learning. 10+ years of leadership experience in global teams, strategies, transformations and operations in DevOps, Cloud, SRE, SW Int, QA/Test, Automation, and Agile, managing complex projects and initiatives, 24/7 ops.

**FUNCTIONAL SKILLS**

DevOps, SRE, SW Int & Test, CI/CD, IaC, GitOps Infrastructure, PaaS, SaaS, Cloud, AWS (6x Certified)

SW & System Test, Strategy, Operations, Test Automation Global Strategy & Operations, Vendor Management

Program / Delivery / Release Management, Agile, SAFe Estimation, Planning, Budget, Cost Control, CapEx/OpEx

**DOMAIN / TECHNOLOGY SKILLS**

* DevOps, SRE, SW Integration, CI/CD, Workflow Automation, Pipeline, Deployments, GitOps
* SW Test, System Test, Integration Test, API Test, White Box Test, Unit Test. Android Test, Espresso
* Test Automation w/ in-house tools, Robot, Python, GTEST, JUnit, TestNG, Selenium WebDriver, Appium
* Data Engineering, Streaming, Machine Learning, AWS - SageMaker, Kinesis, EMR, Glue, Athena, Redshift
* Docker, Kubernetes, Helm, Ansible, Terraform, CloudFormation, Elasticsearch, Monitoring, Security
* Linux, Bash, Python, Pandas, Java, Angular, HTML/CSS, MySQL, Postgres, MongoDB, REST, Microservices
* GIT, GERRIT, GitLab, GitHub, Bitbucket, Jenkins, Bamboo, Artifactory, SonarQube, Open-Source tools
* Network protocols - L2/L3/upper layers, TCP/IP, UDP, TLS, IPSec, DNS, HTTP
* Agile, SCRUM, SAFe. Jira, IBM ALM (RTC, RQM, DNG). SDLC, TDD, BDD, CMM, ASPICE, Cybersecurity
* AWS - IAM, VPC, CloudWatch, EC2, ECS, EKS, Lambda, DevOps, Analytics, Security, Cost, Mgmt services
* **AWS Certified** DevOps, Security, Machine Learning, Data Analytics, Solutions Architect, SysOps Admin

**PROFESSIONAL EXPERIENCE**

**HARMAN INTERNATIONAL**, **Connected Car Division,** Novi, MI **Mar 2015 – Present**

**Director SW Integration & Test, DevOps,** Connected Car Division

Managed global team of 100+ resources (~$5M annual budget) for SW Integration, Test, DevOps and Automation for Connected Car Division, to develop In-Vehicle Infotainment Systems, SaaS, Apps. Teams in NA, EU, India, China. Ran 24/7 ops, SRE, build/test anywhere, build farms, test farms, automation. Championed customer interface, release planning.

* Delivered full system, platform, applications for customer programs for GM, FCA, Audi, Daimler, … and Harman SW/SoC platforms (Intel, Qualcomm, Samsung, Renesas). Managed multiple model year customer deliveries. Supported multiple daily builds per vehicle line per program. Delivered Industry first Android based Infotainment system.
* Led SW Integration, CI/CD, DevOps, SRE for Connected Car Division. Championed DevOps strategies, roadmap.
	+ Managed Android SW Integration vertical. Established global team, build infrastructure, workflow, automation.
	+ Championed Int, build, deployment strategies, CI/CD workflow with code review, static code analysis, unit/int test.
	+ Setup hybrid infra of 100+ servers for Dev, Jenkins, GERRIT, Artifactory, CodeSonar, Data Analytics, Tools.
	+ Implemented IaC using Terraform, Helm, Ansible. Implemented Docker, Kubernetes, Autoscaling, Rollbacks.
	+ Supported 1000+ developers, all regions. Developed processes, guidelines, supported integration issues.
* Championed Data Analytics, Machine Learning based improvements. Implemented data pipeline, data warehouse, dashboards for integration/build/test analytics, health checks, monitoring, log/trace/defect analyzers, recommendations. Tool stack of Python, Flask, Kafka, ELK, Grafana, MEAN, Prometheus, MySQL, MongoDB, ML - scikit-learn, nltk.
* Championed AWS migration for Infra, DevOps, Tools. Setup IAM, VPC, OU, CloudWatch, CloudTrail, Cost Mgmt.
* Implemented Jenkins pipelines, parsers, diff tools, release notes. Established GERRIT, migrated from GitLab.
* Championed DevOps strategy and setup for co-dev programs with OEMs, with Harman as the Master Integrator. A Harman first, enabled winning and successful start of Audi HCP3 program.
* Developed Harman DevOps Framework for provisioning, config mgmt., workflows, integration/build tracking, GitOps.

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HARMAN (continued)

* Led Global Test/QA for Connected Car Division. Championed strategic direction and vision for left shift of quality.
	+ Managed integration test, daily build test, feature test, sprint/release test, regression test, perf /stability test.
	+ Championed global test strategy, processes for SW qualification, CI/CD, quality assessment of SW releases.
	+ Established global team of 80+ engineers. Championed processes, metrics, reports to drive requirements, feature / build quality. Influenced dev teams, setup workflow for quick triage of issues to support CI/CD.
* Achieved ~80% Test Automation for CI/CD, functional, stability and performance testing for programs w/ in-house tools.
* Developed test automation for Harman’s Android platform. Integrated ML techniques - OpenCV, TensorFlow, Keras.
* Developed full suite of API tests, platform and component tests for SoC/IOC platform program (HAL and below, with Automotive extn.) for GM, a Harman first. Developed test frameworks, drivers, tools. Championed end-to-end testing.
* Championed improvements in integration, sync/build time, storage, distribution, utilization, cost, test coverage, test time.
* Championed onsite/offsite test strategy, vendor strategy, vendor engagement, SLAs to meet cost and support goals.
* Sr. Technical Program Manager for Application development and testing for Harman’s first Android based IVI system for GM. Managed multiple agile teams spread over multiple locations. Managed multiple model year programs.
* Championed release management, CCB, defect drive down. Operationalized daily meetings, handoffs, coordination.

**MOTOROLA SOLUTIONS, INC.**, Schaumburg, IL **Jan** **2010 – Dec 2014**

**Software Engineering Manager**, **System Integration & Test/QA,** Private Broadband LTE

Managed System Integration Test for Motorola’s LTE / Broadband Infrastructure Solutions for Public Safety Market.

* Led 50+ engineers across multiple locations, serving as key member of startup team. Developed comprehensive integration and test strategy for LTE infrastructure, applications and devices.
* Planned and managed testing of 6 bi-annual releases for LTE / IMS / VoLTE infrastructure, Network Management, QoS, VOIP, PTT, Messaging, Video, Location, VPN solutions, integration of in-house and 3rd-party products, LTE modems and Android devices. Developed estimates, test strategy, infrastructure.
* Set up LTE lab with multiple LTE cores, IMS/VoLTE infrastructure, network/security and applications. Managed $4M annual budget. Negotiated pricing, maintenance; achieved ~20% savings year to year.
* Developed network, application and device KPIs. Benchmarked and met network KPIs, voice quality, latency, throughput, user experience, application and device performance. Developed test setup/tools.
* Established load and stress LTE lab running 24/7, monitoring KPIs with using LTE / IP / App load tools, custom tools.
* Championed vendor interface for test planning and quality. Chaired weekly calls and monthly reviews.

**MOTOROLA, INC.**, **Mobile Devices,** Libertyville, IL **Sep** **2005 – Dec 2009**

**Software Engineering/QA Manager**, **Motorola Android Platform Test and QA** **Apr** **2008 – Dec 2009**

Managed test architecture team for Motorola’s Android Platform releases / phones. Managed platform health.

* Established a team of 30+ engineers in US and China. Developed full test suite for Motorola’s 1st Android phones.
* Championed integration and system testing, platform health, performance, stability and user experience testing.

**Software Engineering/QA Manager**, **Motorola** **LinuxJava Platform Test and QA** **Sep** **2005 – Mar 2008**

Managed test architecture team for Motorola’s new LinuxJava phone platform. Key member of startup team.

* Established test architecture team with 50+ engineers in US, China, and Brazil. Developed and deployed new test and release processes at 5 development centers.
* Developed test strategy / architecture and full test suite for integration and system testing of the new LinuxJava platform, from bring up to release, on time, meeting extremely aggressive launch schedules.

**ADDITIONAL EXPERIENCE**

**MOTOROLA, INC., Mobile Devices** (continued)

**Test Manager,** 3G Product Integration Test

**Test Development Lead/Manager**, Global New Product Operations

**EDUCATION / PROFESSIONAL DEVELOPMENT**

**Master of Business Administration, MBA**, Lake Forest Graduate School of Management, Lake Forest, IL

**Master of Science, MS**, Software Engineering, Walden University, Minneapolis, MN

**Bachelor of Science, BTech, BS**, Electronics, NIT, Calicut, India

**Master’s Certificate in Project Management**, ESI, George Washington University, DC

**AWS Certified** DevOps Professional, Machine Learning, Data Analytics & Security Specialty, Solutions Architect, SysOps

**Certified Scrum Master**