

Quality Engineering Architect | Mobile • API • AI Systems • Distributed Platforms

Quality Engineering Architect with 15+ years of experience in automation and distributed systems reliability. Specialized in designing validation frameworks for IoT ecosystems, multiple platforms (Mobile/Desktop/Web) and LLM pipelines, with a focus on reducing delivery time and mitigating regression risk in high-scale environments.

Work Experience

QA Automation Specialist – API & Mobile | Arlo | March 2024 – Present • Carlsbad, CA / US

- Architected a cross-platform automation framework for IoT ecosystems, supporting validation across mobile applications, backend APIs, and firmware interactions for thousands of connected devices
- Designed a multi-layer validation strategy combining mobile UI automation, API verification, and device telemetry analysis, reducing regression risk across hardware and software layers
- Built automation coverage for critical device lifecycle flows (pairing, provisioning, firmware updates, streaming), improving release confidence across mobile and firmware releases
- Developed automated validation pipelines for device–cloud communication and IoT event flows, enabling reliable validation of distributed system interactions
- Introduced shift-left validation strategies across mobile, backend, and firmware teams, increasing early defect detection and reducing production incidents

Senior SDET | RowbotAI | 2023 – 2024 (Part Time) • San Diego, CA / US

- Engineered LLM evaluation frameworks improving response reliability and reducing hallucination rates through semantic similarity scoring and automated validation pipelines
- Designed data ingestion and vectorization pipelines supporting conversational AI systems using Python and vector databases
- Built backend architectures for voice-based systems integrating speech interfaces with AI services and production workflows
- Implemented validation strategies for conversational pipelines, ensuring consistency and reliability across AI-driven interactions
- Optimized AWS infrastructure for AI workloads, improving system reliability and reducing response latency

QA Manager | Adentis (Outsourcing) | 2021 – 2024 (Multiple Clients) • Porto, PT

- Established QA strategy across 5+ global client environments, reducing release cycle time by 20% and increasing deployment frequency by 35% through standardized CI/CD governance.
- Designed automation frameworks for backend services and APIs, improving test coverage and consistency across distributed systems
- Built QA strategies based on production incident analysis, reducing recurring failures and improving system stability
- Integrated automated validation pipelines into CI/CD workflows, increasing release traceability and quality visibility
- Collaborated with engineering and product teams to improve delivery speed while maintaining system reliability

DevOps Engineer/ SRE | Ipiranga/Santander | 2019 – 2021 • Brazil

- Architected a cloud-native testing platform on AWS, enabling large-scale automated regression execution across distributed systems and microservices
- Designed containerized test infrastructure using Docker and ECS/Fargate, supporting scalable automation workloads across multiple environments
- Implemented IaC with Terraform, reducing environment provisioning time by 80% (from days to minutes), directly enabling 24/7 availability for critical financial microservices
- Built observability pipelines using CloudWatch, Grafana, and Prometheus, enabling real-time monitoring of system performance and quality metrics
- Supported production systems and incident response, contributing to reliability improvements across high-availability platforms

QA Architect | Multiple Clients | 2010 – 2019 • Brazil

- Designed automation solutions for enterprise platforms across finance, media, and e-commerce domains
- Built validation systems for voice platforms (IVR/VoIP) enabling repeatable testing of telephony workflows
- Developed automation strategies for legacy systems lacking stable identifiers or test interfaces

Technologies and Languages

- Languages: Python, TypeScript/JavaScript, Java, SQL
- Automation & Quality: API, Mobile, Web Testing, Distributed Systems Validation
- AI Systems: LLM Evaluation, RAG Pipelines, Conversational Systems Validation, Semantic Testing
- Cloud & Infrastructure: AWS, Docker, Kubernetes, Terraform, CI/CD Pipelines
- Observability: Grafana, Prometheus, CloudWatch
- Systems: IoT Validation, API & Integration Testing, Reliability Engineering

Education and Certifications

- **B.Sc. Machine Learning**, PUC-GO/Brazil.

2023 – 2027