

Rajiv Silva

Senior SDET | QA Leadership | AI/ML Testing | Automation Transformation Expert

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SUMMARY

QA Leader with 14+ years of experience scaling QA organizations in regulated industries (Life Sciences, Fintech, Enterprise Security). Proven success in building test strategies, driving automation transformation, and aligning QA operations with business objectives. Adept at leading global teams, shaping quality governance, and leveraging cloud, CI/CD, and AI/ML technologies to deliver enterprise-grade quality at scale. Recognized for reducing release risk, accelerating delivery cycles, and building QA functions that balance compliance with innovation.

KEY ACHIEVEMENTS

✓ Cross-Platform Automation Architecture

Architected end-to-end frameworks spanning mobile, web, and API layers, achieving 85% automation coverage and integrating OTP automation, deep-link validation, and dynamic test data generation into unified CI/CD pipelines.

✓ QA Governance by Design

Engineered bespoke QA governance frameworks across multiple organizations by synthesizing multi-stakeholder requirements into validated, production-ready quality strategies adopted at the team and organizational level.

✓ Agentic BDD Pipeline

Engineered a fully autonomous test generation pipeline that converts user stories and acceptance criteria into Cucumber scenarios without human authoring, compressing feature test creation from 3 to 4 hours to under 10 minutes and eliminating a chronic bottleneck in agile delivery cycles.

✓ Domain-Adaptive QA Leadership

Built and led QA functions across fundamentally different engineering cultures, from compliance-heavy regulated industries to fast-moving fintech, consistently translating new domain requirements into effective quality operations from the ground up.

✓ QA Team Scaling and Mentorship

Built and scaled QA teams from the ground up across multiple organizations, establishing hiring frameworks, onboarding programs, and career development structures that reduced ramp time and improved team retention.

✓ Custom Fine-Tuned LLM for QA

Trained a project-scoped LLM on SOPs, test plans, and defect history to serve as an on-demand QA knowledge engine, cutting documentation retrieval time dramatically and accelerating onboarding for new team members.

SKILLS

Tech Stack

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|--------|----------------------------|----------|---------|---------|----------|---------------|--------|------------|
| Appium | WebdriverIO | Selenium | Postman | Jenkins | CircleCI | Browser Stack | CI/CD | |
| Python | JavaScript | Cypress | Postman | AWS | Azure | Docker | Mobile | Kubernetes |
| Claude | LLM-driven Test Generation | Docker | Jira | | | | | |

Soft Skills

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|------------------|-------------------|--------------------------------|-----------------|
| Mentoring | People Management | Cross-Functional Collaboration | Team Management |
| Quality Advocacy | Risk Management | Analytical Thinking | Problem Solving |

EXPERIENCE

Senior SDET

Alira Health

📅 03/2024 - Present 📍 Remote, Toronto

- Championed AI-assisted coding adoption, completing 3 AI-driven projects to enhance QA automation and error detection.
- Drove AI-enabled testing strategy, automating workflows with ML models in OCR, object detection, and LLMs across mobile and web.
- Built a Node.js/Selenium/WebdriverIO test framework achieving 85% automation coverage for mobile apps.
- Developed custom tools for OTP automation (Twilio) and deep-link generation, cutting manual test prep by 50%.
- Engineered a fully agentic BDD pipeline that autonomously generates Cucumber scenarios from user stories and acceptance criteria — reducing authoring time from 3 to 4 hours to under 10 minutes per feature.
- Developed custom fine-tuned AI skills scoped to individual project contexts, feeding UI components and functional specs to enable agents to perform autonomous test selection, validation, and regression triage.
- Designed and deployed a custom fine-tuned LLM trained on project-specific SOPs, test plans, and defect history — dramatically reducing documentation lookup and knowledge retrieval time for QA teams.

QA Manager

Wellfield Technologies

📅 12/2020 - 2023 📍 Remote, Toronto

- Directed global QA teams (10+ engineers) across 3 projects, overseeing hiring, mentoring, and performance management
- Established QA strategy for mobile & web fintech platforms, improving defect detection rate by 40% and reducing release failures by 25%
- Partnered with Product and DevOps to define release governance and ensure regulatory compliance
- Expanded automation frameworks for mobile, web, and APIs, increasing automated coverage by 60%
- Optimized CI/CD pipelines, accelerating release cycles and enhancing delivery confidence

Senior SDET

Thoughtworks

📅 02/2018 - 12/2020 📍 Toronto

- Partnered with product and development stakeholders to align test planning with agile delivery goals, improving release predictability.
- Built scalable CI/CD pipelines that reduced build failures and accelerated deployments.
- Enhanced project efficiency by 10% by defining QA strategy and creating the QA SOP Bible for 3 projects.
- Reduced build failures by 40% and accelerated deployments by developing scalable automation frameworks for 3 applications.

QA Team Lead

WinMagic

📅 10/2015 - 02/2018 📍 Mississauga

- Increased product security by 40% through manual and automated testing processes.
- Developed QA strategy for endpoint security across Windows and Linux, ensuring compliance with enterprise encryption standards.
- Partnered with DevOps to introduce tooling that streamlined test environment deployment, reducing provisioning time from days to hours.
- Implemented automation for security, load, and chaos testing, improving test efficiency by 35% and enhancing product resilience.

EDUCATION

Diploma: Video Game Design And Development

Trios College

📅 01/2011 - 11/2013 📍 Mississauga, ON

Project Management

University of Toronto

📅 07/2015 - 11/2016 📍 Mississauga, ON