Safwan Saba

Software Development Engineer in Test (SDET)

(352) 727-9967 | safwan@safwansaba.info Portfolio | LinkedIn | GitHub

Professional Summary

Results-driven Senior SDET with 10+ years of experience designing enterprise-grade quality solutions across finance, healthcare, and compliance sectors. Skilled in AI-augmented test automation, with a foundational understanding of Large Language Models (LLMs) and Generative AI concepts. Architected a self-healing QA platform (Sentinel) that uses multimodal AI to autonomously detect and resolve UI regressions. Proven ability to build scalable automation frameworks (BDD, POM, Hybrid), drive CI/CD maturity in SAFe environments, and lead distributed engineering teams to enhance product quality and accelerate development cycles. Track record of delivering 30%+ reduction in regression cycles, 40% automation performance gains, and 25% decrease in production defects.

Notable Recognition: Discovered and responsibly disclosed a critical security vulnerability in Apple iOS 5.0.1, impacting 8M+ users worldwide.

Technical Skills

Languages & Frameworks: Java, TypeScript, Python, C#, SQL | Selenium WebDriver, Playwright, Cypress, Appium, REST Assured, Cucumber (BDD), TestNG, JUnit
DevOps & Infrastructure: Docker, Jenkins, Azure DevOps, GitHub Actions, Git, Maven | AWS (EC2, S3, Lambda), Azure
AI, Data & Observability: Gemini API, OpenAI API, Prompt Engineering, LLM Validation | MySQL, PostgreSQL, MongoDB, JDBC | Jira Xray, Splunk, Grafana, Allure

Projects

Neural Profile – Interactive Career Visualization Platform | Live Demo
- Built an interactive neural network visualization of 15 years of career experience, where each skill is a node and connections represent relationships between technologies, projects, and expertise

Ask AI About Me – LLM Powered Interactive Resume | Live Demo
- Built an interactive AI chatbot governed by system prompt engineering and Next.js context injection to accurately guide Gemini 2.0 based on my professional background and skills

Sentinel – Autonomous Self-Healing QA Platform | Live Demo
- Architected a full-stack autonomous QA platform with AI-powered self-healing using Gemini 2.0 reducing manual locator maintenance by 80%
- Engineered multimodal failure analysis pipeline ingesting DOM snapshots, screenshots, and stack traces for 90%+ fix accuracy
- Built real-time defect detection feed with 3-second polling, live mission telemetry, and an integrated Community Hub for collaborative triage
- Implemented pre-flight build validation (mvn test-compile) to ensure AI-generated code never breaks the project

Work Experience

Lead Quality Engineer | PwC | Tampa, FL | May 2022 – May 2025

- Owned end-to-end quality strategy for 3 enterprise applications, designing a BDD framework in Java that reduced regression cycles from 8 hours to under 3, saving ~20 engineering hours per sprint

- Architected Playwright + TypeScript automation framework, increasing test coverage by 45% across web and API layers

- Led and mentored 3 offshore teams (9 engineers), establishing code review standards and test design patterns that reduced critical production defects by 25%

- Drove CI/CD maturity in a SAFe environment by integrating 200+ automated API and database test cases into Azure DevOps pipelines, achieving 90% automation coverage

- Enhanced automation performance by 40% through MySQL and API testing strategy using JDBC and REST Assured

Quality Engineer | Mednax | Sunrise, FL | Aug 2021 – May 2022

- Architected modular Page Object Model framework using Playwright with Java and TypeScript for critical healthcare applications

- Boosted test coverage by 35% and eliminated 40% of manual regression effort through strategic automation

- Implemented API testing strategy for healthcare data integration pipelines using REST Assured

Quality Analyst | PwC | Tampa, FL | Nov 2020 – Aug 2021

- Performed comprehensive end-to-end testing across front-end, back-end, API, and database layers

- Developed C# + Selenium automation scripts using BDD (SpecFlow) within Azure DevOps

Quality Analyst | Fannie Mae | Tysons, VA | Jul 2020 – Nov 2020

- Developed automated regression suites using Java, Selenium, Cucumber, and Jenkins, reducing manual testing effort by 30%

- Validated RESTful web services with Postman and REST Assured; performed mobile automation testing with Appium (iOS/Android)

Earlier Career (2012 – 2020)

SDET and Quality Engineering roles at Mobius Logic (Tysons, VA), Responsible Robotics (Tysons, VA), and MBC Group (Dubai, UAE). Responsibilities included building Hybrid Selenium frameworks, configuring Jenkins CI pipelines, and testing enterprise-scale media streaming platforms.

Education & Certifications

Bachelor's Degree in Software Engineering and Automated Systems
State Engineering University of Armenia | 2004 - 2008

Supervised Machine Learning: Regression and Classification
Stanford University | DeepLearning.AI

ISTQB Certified Tester, Foundation Level (CTFL)
ASTQB