

Emmanuel Eko

Senior SDET | QA Automation Engineer | Test Architect

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PROFESSIONAL SUMMARY

Senior SDET and QA Automation Engineer with 5+ years of experience architecting and scaling test automation frameworks from the ground up for SaaS platforms across FinTech, PropTech, and MarTech. Deep expertise in Playwright, Cypress, TypeScript, and Cucumber/BDD, with a consistent record of delivering 85–90%+ regression coverage integrated into CI/CD pipelines (Jenkins, GitHub Actions) with quality gates and Go/No-Go reporting. Author of Smart Pact (npm) — an open-source library that auto-generates Pact contract tests from existing API suites, cutting contract authoring effort by ~60% in production. Background in full-stack engineering (React, Angular, Node.js) enables testability-first design, early defect detection through shift-left practices, and deep cross-functional collaboration with engineering and product teams. Proven mentor and technical leader in distributed Agile teams across multiple time zones.

CORE COMPETENCIES

Test Automation: Playwright, Cypress, Jest, Selenium WebDriver — E2E, Regression, Smoke, Sanity, Integration

API & Contract Testing: REST API Testing, Postman, Swagger, Pact, Smart Pact (npm), Contract-First Testing

BDD / Test Design: Cucumber, Gherkin, SpecFlow (familiar), Requirements Traceability, Acceptance Criteria Mapping

Performance Testing: k6, Apache JMeter — Load, Stress & Spike Testing, Bottleneck Detection, Capacity Planning

CI/CD & DevOps: GitHub Actions, Jenkins, Docker, Kubernetes, Quality Gates, Automated Result Triage

Cloud & Cross-Platform: AWS (SaaS), Azure (SaaS), BrowserStack, Cross-Browser & Mobile Testing (iOS / Android)

Test Management: TestRail, QMetry, Jira — Test Planning, Defect Lifecycle, Go/No-Go Reporting

Languages: TypeScript, JavaScript, Python, Java, SQL (data validation)

Engineering Practices: Agile/Scrum, Shift-Left Quality, SDLC, Technical Mentoring, Stakeholder Collaboration

PROFESSIONAL EXPERIENCE

Senior SDET / QA Automation Engineer

ProFinance — Remote | 2025 – Present

- Inherited a bloated, flaky BDD test suite for a multi-party fintech platform and led a full architectural overhaul — reducing suite runtime by over 60% and cutting flakiness from endemic failures to near-zero through systematic root cause analysis and framework redesign.
- Solved mid-test user switching without repeated logins by engineering a pre-seeded user pool combined with Playwright browser context swapping: a pool-setup script authenticates one user per country per worker slot once, persisting sessions to disk, so tests switch identities instantly via storageState injection — no login page, no OTP, no wait.
- Designed a worker-slot namespacing system (CUCUMBER_WORKER_ID) ensuring each parallel Cucumber worker reads its own isolated auth files (e.g. united_states-0.json, united_kingdom-3.json), eliminating race conditions and shared state across concurrent test runs entirely.
- Expanded test scope from E2E BDD flows to a full multi-layer quality suite covering: API testing, Pact contract testing, database validation, performance testing (k6), security testing, regression suites, visual regression, factories, fixtures, and mocks — all integrated into CI/CD pipelines with automated quality gates.
- Implemented switchToUserByEmail() and switchToUserById() helpers enabling dynamic party resolution mid-scenario — critical for sender/receiver flows where counterparty users are created at test runtime rather than pre-seeded.
- Achieved significant regression coverage growth across multi-party transaction flows, contract creation, and payment journeys with full requirements traceability linking acceptance criteria to executable Gherkin scenarios.

Lead SDET / Senior Quality Engineer

Automobilmart — Remote | January 2025 – Present

- Designed and built the entire test automation framework from scratch using Playwright + TypeScript + Cucumber/BDD for a SaaS vehicle commerce platform hosted on AWS, establishing a testability-first foundation from day one.
- Achieved 90%+ regression coverage across checkout, instalment payment, guarantor, and admin portal flows, with full requirements traceability linking acceptance criteria to executable test scenarios.
- Conceived and delivered Smart Pact — a POC that evolved into a production npm library — auto-generating Pact consumer contract tests from existing API suites, reducing contract authoring effort by ~60% and integrating seamlessly into CI/CD pipelines.
- Integrated Playwright suites into GitHub Actions with automated quality gates and Go/No-Go test summaries for every release, enabling confident deployment decisions with zero manual triage.
- Conducted API testing (Postman, Swagger) and SQL data validation across all backend microservices, catching data-integrity defects before they surfaced in front-end flows.
- Designed and executed k6 performance scenarios targeting critical payment and guarantor journeys; identified and resolved two critical backend bottlenecks pre-launch, preventing production incidents.

- Mentored junior QA engineers in Playwright and Cucumber BDD; all mentees achieved independent feature-file authorship within two sprint cycles.

SDET / QA Automation Engineer

Spleet Africa — Remote | January 2024 – December 2024

- Owned and scaled the Cypress + TypeScript automation framework for a SaaS property rental platform, growing regression coverage from 54% to 89% across apartment search, tenant onboarding, and rent payment flows.
- Reduced suite flakiness from 21% to under 4% across 280+ test specs by performing root cause analysis on async payment state transitions and dynamic listing renders.
- Integrated Cypress pipelines into GitHub Actions with automated failure triage, cutting manual pre-release validation effort by 60% and enabling same-day defect identification.
- Authored Cucumber/Gherkin BDD feature files directly from acceptance criteria, ensuring full traceability between product requirements and executable test coverage.
- Built API test coverage for tenant verification, rent processing, and listing endpoints using Playwright and Jest, catching three critical contract regressions before production release.
- Parallelised cross-browser suites on BrowserStack across Chrome, Firefox, Safari, and mobile viewports (iOS/Android), increasing validated platform configurations from 3 to 12.
- Mentored one junior QA engineer in Cypress and BDD patterns; contributed to sprint planning, stand-ups, and retrospectives as a quality advocate across the Agile team.

QA Automation Engineer

Oresundslinjen (formerly ForSea.com) — Remote | January 2022 – December 2023

- Built and scaled a Cypress + JavaScript automation framework for the Oresund ferry booking platform, covering passenger booking, payment processing, and account management flows.
- Maintained 500+ structured test cases in TestRail across functional, regression, and exploratory suites, with full requirements traceability aligned to each release.
- Integrated Cypress regression runs into Jenkins CI pipelines with automated result triage and Go/No-Go reporting, reducing manual pre-release effort by 65%.
- Reduced regression suite runtime from 70 minutes to 22 minutes by implementing parallel execution on BrowserStack Automate across 14 browser and OS configurations.
- Reduced regression escapes by 40% through structured defect root cause analysis and close developer collaboration across distributed engineering teams.
- Led BDD adoption by authoring Gherkin feature files for all critical customer journeys, improving shared quality understanding between QA, product, and developers.
- Performed SQL data validation to verify backend data integrity across APIs and database layers.

QA Automation Engineer

GainTheory — Remote | June 2021 – August 2022

- Built a Cypress automation suite for a SaaS marketing intelligence platform, covering data dashboards, report generation, and user access workflows within short Agile sprint cycles.
- Organised 300+ test cases in TestRail — boundary, negative, and sanity — with Jira defect tracking and consistent regression traceability across all releases.
- Wrote Gherkin BDD feature files aligned to product requirements, reducing misalignment defects by 30% and improving visibility across engineering and product teams.
- Configured GitHub Actions to trigger automated Cypress regression on every pull request, compressing feedback cycles and increasing deployment confidence.
- Upskilled two frontend engineers in Cypress patterns and test case design, enabling independent smoke test execution and reducing QA bottlenecks.

OPEN-SOURCE PROJECTS & TECHNICAL HIGHLIGHTS

- **Smart Pact** (npm — author, maintainer) — Open-source library that auto-generates Pact consumer contract tests from existing API test suites. In production CI/CD pipelines; eliminates manual contract authoring and accelerates consumer-provider integration validation.
npmjs.com/package/smart-pact
- **@simplenodeguy/tsdsa** (npm — author, maintainer) — TypeScript-first data structures library applied in test automation to reduce complex test data setup overhead by ~35% in performance-testing scenarios involving nested multi-party data.
- **Feature File Runner** (in progress) — UI tool for executing Cucumber feature files by tag without running full suites, reducing feedback latency in BDD-driven Agile teams. Exploring intelligent test orchestration and self-healing test patterns.

- **Performance Engineering** — k6 and JMeter load scenarios for critical SaaS user journeys; surfaced latency bottlenecks and capacity limits ahead of high-traffic production releases.
- **CI/CD Optimisation** — Achieved 50–70% regression runtime reductions across multiple platforms via BrowserStack parallelisation, Jenkins and GitHub Actions quality gates, automated triage, and critical path prioritisation.

EDUCATION

B.Sc. Computer Engineering (Software Engineering) — University of Benin

ADDITIONAL INFORMATION

- Active open-source contributor: Smart Pact and @simplenodeguy/tsdsa published and maintained on npm.
- Native-level written and spoken English; experienced in distributed onshore/offshore engineering teams across UK, US, European, and African time zones.
- Full-stack engineering background (React, Angular, Node.js) enables deep developer collaboration, architecture-level quality advocacy, and testability-first design.
- Passionate about shift-left quality, intelligent test orchestration, and building automation frameworks that scale with product complexity and team growth.
- Right to work: please enquire — open to sponsorship discussions for UK/EU roles.

TECHNICAL STACK

Test Frameworks: Playwright, Cypress, Jest, Selenium WebDriver, Pact, Smart Pact

Languages: TypeScript, JavaScript, Python, Java, SQL

API & Backend: REST API, Postman, Swagger, Contract Testing, GraphQL (familiar)

Performance: k6, Apache JMeter, Bottleneck Detection, Load & Stress Testing

BDD / Management: Cucumber, Gherkin, TestRail, QMetry, Jira, SpecFlow (familiar)

CI/CD & Cloud: GitHub Actions, Jenkins, Docker, Kubernetes, AWS, Azure

Cross-Browser: BrowserStack, Parallel Execution, iOS/Android Mobile Testing

App Frameworks: React, Angular, Node.js (working knowledge)

Tooling: Git, VS Code, Postman, Smart Pact (npm), @simplenodeguy/tsdsa (npm)