

ARSAL AZEEM

SENIOR SDET | QA AUTOMATION ENGINEER | AI-ASSISTED QUALITY ENGINEERING

Islamabad, Pakistan | +92 308 4512113 | azeemarsal@gmail.com | LinkedIn | GitHub

PROFESSIONAL SUMMARY

Software Development Engineer in Test (SDET) with strong software engineering and automation experience across **Python, Java, API automation, distributed microservices, browser testing, Kafka, gRPC, databases, CI/CD, performance testing and AWS**. Designs and maintains substantial components of large enterprise automation frameworks and service-level test suites. Strong Python background spanning backend development, pytest/unittest, ORM-based applications, Redis and API testing; currently works extensively with Java, JUnit 5, REST Assured and Playwright. Uses modern AI coding agents such as Codex and Claude for codebase exploration, implementation, debugging, refactoring and test development, with practical prompt/context engineering and reusable agent workflows.

TECHNICAL SKILLS

Languages: Python (advanced), Java, JavaScript, Bash, SQL

Automation & Testing: pytest, unittest/PyUnit, JUnit 5, REST Assured, Playwright, Selenium, API testing, service-level testing, integration testing, end-to-end API testing, browser automation, unit testing

Distributed Systems: REST, gRPC, Kafka, microservices, asynchronous/event-driven workflows, database validation, hardware/IoT dependency mocking

Backend & Data: PostgreSQL, ORMs, Redis, SQL, test data creation, backend validation

Performance: Python Locust, API load/stress testing, browser-driven performance POCs

CI/CD & DevOps: GitHub Actions, scheduled CI jobs, Bash scripting, Cron, Docker, Git

Cloud: AWS - VPC, EC2, ELB, S3, ECR, Lambda; cloud infrastructure testing; familiarity with AWS Bedrock and cloud-agent concepts

AI-Assisted Engineering: OpenAI Codex, Claude, AI coding agents, prompt engineering, context engineering, persistent memory, reusable local skills/instructions, agent supervision

Additional Tools: Jira, TestRail, Charles Proxy, Redash, Sauce Labs, LambdaTest

PROFESSIONAL EXPERIENCE

Motive (formerly KeepTruckin) | SQA Engineer - Automation / SDET

Nov 2022 - Present

- Designed and architected substantial components of a large-scale enterprise automation framework using Java, JUnit 5, REST Assured and Playwright.
- Build service-level automated tests for distributed microservices, validating REST APIs, Kafka messaging, gRPC services, databases and cross-service workflows without relying exclusively on UI-level end-to-end tests.
- Develop reusable framework components for service clients, assertions, test data, database checks and integration workflows, improving maintainability across complex automation suites.
- Own and maintain scheduled CI automation jobs and regression pipelines; investigate failures across framework, application, infrastructure, messaging and environment layers.
- Test highly available systems involving real-time location, dashcams, mobile applications, hardware integrations and cloud-hosted microservices for enterprise fleet safety products.
- Use Codex and Claude as engineering copilots for large-codebase analysis, test development, debugging, refactoring and repetitive implementation tasks while reviewing and supervising generated changes.

Eurus Technologies | Senior SQA Engineer**Apr 2022 - Nov 2022**

- Tested AWS infrastructure and cloud resources, including provisioning and validation of cloud-based environments.
- Performed stress/performance testing and automated validation for cloud systems and an in-house CloudFormation CLI automation tool.
- Used Bash scripting and CLI-based automation to support repeatable test execution and infrastructure checks.
- Worked with AWS services including VPC, EC2, ELB, S3, ECR and Lambda.

Vizteck Solutions | SQA Engineer**Oct 2020 - Mar 2022**

- Built automation using Python and Selenium and performed end-to-end API testing for backend services.
- Created Locust-based performance and stress tests for APIs and browser-driven workflows.
- Developed a proof-of-concept virtual/mock IoT device to remove physical hardware dependency from automated tests while preserving realistic hardware-to-software flows.
- Performed functional/manual testing, sprint planning support, Jira-based defect management and release follow-up.

BCD Apps | Junior SQA Engineer**Feb 2020 - Oct 2020**

- Executed functional, regression and release testing for web/application features and documented defects.
- Supported test case development, defect reporting and validation of fixes across development cycles.

SELECTED ENGINEERING HIGHLIGHTS

- Microservice test engineering: validates workflows across API -> service -> Kafka -> database -> gRPC/downstream services, enabling targeted service-level coverage and faster failure isolation.
- Hardware/IoT testability POC: created a software-based virtual device that mimicked real device behavior so hardware-dependent flows could be exercised repeatedly without requiring a physical device for every test run.
- AI-assisted engineering workflow: uses repository context, structured prompts, persistent memory and reusable agent skills/instructions to supervise Codex/Claude on implementation, debugging, code review and automation tasks.

EDUCATION & CERTIFICATION

BS Software Engineering - National University of Modern Languages (NUML), Islamabad | 2016 - Jan 2020**Certification:** REST API Automation with REST Assured - Udemy