

Muhammad Hammad Faisal

QA Automation Engineer (SDET) — Playwright · WebdriverIO · Selenium · Appium

hammadfaisal178@gmail.com | +92 344 4254413 | Lahore, Pakistan
linkedin.com/in/m-hammad-faisal | github.com/M-Hammad-Faisal

PROFESSIONAL SUMMARY

QA Automation Engineer / SDET with 3+ years building and scaling test automation frameworks for web, mobile, and data-intensive applications. Expert across Playwright, Cypress, WebdriverIO, Selenium, and Appium in TypeScript, JavaScript, and Python. Cut a 100+ file WebdriverIO suite to 60 files and its runtime from 8 hours to 2 with parallel execution and a distributed Selenium Grid; reduced regression time 40% on an earlier engagement. Designed framework abstraction layers that make tool migrations a single-file change and unified Android / iOS / web suites behind one factory-driven configuration. Strong on CI/CD (GitHub Actions, GitLab CI, Jenkins), Allure reporting, and Page Object Model.

PROFESSIONAL EXPERIENCE

Software Engineer

Jun 2024 – Present

[Arbisoft](#)

Lahore, Pakistan

Core automation engineer across two client products — FixAlert (test automation) and Zuub (data pipelines).

- Refactored FixAlert's inherited 100+ file WebdriverIO suite to 60 files with a cleaner page-object architecture, removing large-scale duplication.
- Implemented parallel execution and a distributed Selenium Grid that cut full-suite runtime from 8 hours to 2 hours with no loss of coverage; integrated CI/CD via GitHub Actions.
- Built production web-scraping and test-data pipelines for Zuub with Playwright and Patchright — stealth browser configuration, fingerprint spoofing, and CAPTCHA bypass via 2Captcha integration.
- Designed a state-based credential-rotation system for automated flows, cycling thousands of accounts across active runs with zero lockouts.
- Consolidated 23 automation integrations under one unified ID to eliminate session conflicts — merged shared modules within a 2-week deadline; publicly recognized by the Team Lead.
- Established PR review and creation checklists and enforced TypeScript standards across the team (find over filter+[0], unknown over any); built a FastAPI service for automated PDF data extraction using the factory pattern.

Jr. Software Engineer — Test Automation

May 2023 – Jun 2024

[Arbisoft](#)

Lahore, Pakistan

- Built end-to-end automation frameworks in WebdriverIO for web and mobile (Android, iOS) platforms.
- Designed a framework abstraction wrapper over Cypress so the suite depended on one interface, not the tool — migrated to Playwright by changing only the wrapper; pattern reused across Arbisoft projects, including Appium → WebdriverIO moves.
- Implemented a local Selenium Grid with Appium for parallel execution, cutting regression testing time by 40%.
- Built a cross-platform framework using the factory pattern to unify Android, iOS, and web configs; solved a dynamic recursive Q&A automation problem (variable depth and branching) with recursive traversal.
- Mentored teammates on WebdriverIO, Selenium Grid, and parallel execution; ran internal knowledge-sharing sessions and helped onboard the Zuub project's automation infrastructure and quality gates.

Freelance Software Engineer

Apr 2023 – Dec 2024

[Upwork](#)

Remote

- Delivered multi-framework test automation across Playwright, WebdriverIO, Cypress, and Selenium for a range of client web apps.
- Set up CI/CD pipelines and designed test architecture from scratch.
- Built stealth scraping infrastructure with Patchright and anti-detection techniques.

Jr. Software Engineer

Aug 2022 – May 2023

[Ginkgo Retail](#)

Lahore, Pakistan

- Built and maintained responsive React / Django features across the SDLC in an agile team.
- Developed a Learning Management System end-to-end during the internship phase.
- Gained early QA grounding — manual testing, bug reporting, and verifying features against acceptance criteria.

TECHNICAL SKILLS

Test Automation: Playwright, Cypress, WebdriverIO, Selenium, Selenium Grid, Appium, Puppeteer, Patchright, PyTest, Page Object Model

Languages: TypeScript, JavaScript, Python, Java

CI/CD & Reporting: GitHub Actions, GitLab CI, Jenkins, Git, Docker, Allure Reports, Mocha

Scraping & Anti-Detection: stealth browser config, fingerprint spoofing, CAPTCHA bypass (2Captcha), rotating residential proxies

API & Backend: REST APIs, Postman, Supertest, FastAPI, Node.js, Django

Patterns: Factory, Wrapper / Abstraction, Page Object Model, Recursive traversal

KEY PROJECTS

SwagLabs Automation Framework

Test automation framework for SauceDemo — 50 automated tests across login, cart, checkout, sorting, and performance; dual Selenium + Playwright engines, multi-browser (Chrome / Firefox / Edge), parallel execution via pytest-xdist, Page Object Model with a factory, Allure reporting, GitHub Actions CI.

github.com/M-Hammad-Faisal/Website-Tester

Framework Abstraction Wrapper (Cypress → Playwright)

Abstraction layer over Cypress enabling a full-suite migration to Playwright via a single-file swap. Adopted across multiple Arbisoft projects for framework transitions.

Cypress, Playwright, TypeScript, Design Patterns

wdio-wait-for

Open-source library of expected-condition helpers for WebdriverIO — composable, promise-based waits for reliable end-to-end tests.

github.com/M-Hammad-Faisal/wdio-wait-for

Code Mage — QA Automation Content Platform

Technical content platform for QA and automation engineers; 28+ tutorial chapters across Playwright, WebdriverIO, and Cypress. Next.js 15, Supabase, TypeScript.

code-mage.dev

EDUCATION

Bachelor of Engineering — Computer Engineering

[University of Engineering and Technology, Lahore](#)

Oct 2019 – May 2023 · GPA 3.60 / 4.0

CERTIFICATIONS

- Python for Everybody Specialization — University of Michigan / Coursera
- TypeScript Variables and Data Types — LinkedIn Learning

ADDITIONAL

- **Open Source:** Contributor to the WebdriverIO repository; author of `wdio-wait-for` and several automation and developer tools.
- **Leadership:** Board of Governor and Director of Graphic Design, ACM UET Lahore (2020–2023).
- **Languages:** English (Professional), Urdu (Native), Punjabi (Native).