

Hassan Abdul Sattar

SQA / Test Automation Engineer

📍 Islamabad, Pakistan · Remote-ready ✉ hassan.as.swe@gmail.com 🔗 [linkedin.com/in/hassan-sattar-a99862260](https://www.linkedin.com/in/hassan-sattar-a99862260) 📁 github.com/Hassan-301

SUMMARY

QA-focused Software Engineer (FAST-NUCES 2026, **Dean's List**, focus on Test Automation) who **builds test automation, not just test cases**. My final-year project is a self-learning **Playwright** framework that generates its own test data and measures coverage. Experienced in functional, regression, API, load and security testing, with a backend development background (NITB) for reading code and working closely with developers.

TECHNICAL SKILLS

Test Automation	Playwright, Cypress, Python, JavaScript, data-driven testing, test data generation
API & Performance	Postman, JMeter, REST API testing
Testing Methods	Manual, functional, regression, integration, exploratory; black/white/grey-box; boundary value analysis; test planning & defect reporting
Security Testing	SQL injection & XSS payloads, STRIDE threat modeling, Burp Suite, Wireshark
Quality Metrics	Coverage analysis, cyclomatic complexity, CK metrics, fault injection & reliability modeling, COCOMO
CI/CD & Tools	GitHub Actions, Docker, Git, Jira, Agile/Scrum, SQL (PostgreSQL, MySQL, SQL Server)

EXPERIENCE

Software Engineering Intern (Backend) <i>National Information Technology Board (NITB), Government of Pakistan</i>	Jul 2025 – Aug 2025 Islamabad
Developed backend REST APIs in PHP Laravel for government digital platforms in cross-functional Agile teams, gaining first-hand knowledge of API behaviour and integration points.	
Lab Demonstrator: Data Structures & ICT <i>FAST National University of Computer & Emerging Sciences</i>	Sep 2025 – May 2026 Islamabad
Supported lectures and labs for 50+ students, mentoring them through hands-on programming work.	

PROJECTS

AutoValid: Self-Learning Black-Box Testing Framework FINAL YEAR PROJECT GitHub ↗	Aug 2025 – Jun 2026
Tech: Playwright, Python, ML/NLP, Node.js, React, PostgreSQL, Neo4j, ClickHouse, Redis	
- Built a framework that takes only a URL, crawls the app with Playwright and builds a live state-flow graph. - Classified input fields with ML/NLP from DOM attributes and generated valid, boundary and adversarial data (SQL injection, XSS), the gap that Selenium, Playwright and Cypress leave open. - Ran tests end to end, measuring state, form and workflow coverage, with heatmap and defect reports.	
Software Quality Audit of an AI-Generated Codebase	Apr 2026 – May 2026
Tech: C#, SQL Server, CK metrics, fault injection, KLM, COCOMO	
Audited an AI-generated C# system with cyclomatic complexity and CK metrics, fault injection with reliability modeling, KLM usability evaluation and COCOMO estimation.	
SecureShield: Security Testing of an E2E Encrypted Messenger GitHub ↗	Nov 2025 – Dec 2025
Tech: React, Node.js, Web Crypto API, Burp Suite, Wireshark	
Threat-modeled with STRIDE and verified mitigations by running MITM and replay attacks.	
Kubernetes CI/CD Pipeline GitHub ↗	May 2025
Tech: Docker, Kubernetes, GitHub Actions	
Automated build, push and redeploy of a containerized MERN app on every push to main.	

EDUCATION

Bachelor of Science in Software Engineering <i>FAST National University of Computer & Emerging Sciences (FAST-NUCES)</i>	Aug 2022 – Jun 2026 Islamabad
Dean's List of Honour (Spring 2026). Focus areas: Software Development & Testing, Test Automation, Workflow Automation.	

CERTIFICATIONS & ACHIEVEMENTS

Software Engineering Essentials · Coursera	DevOps Essentials · Coursera
Git & GitHub · Coursera	AWS Cloud Foundations · 2026
Certificate of Achievement, NaSCon'25 Software Engineering Quiz · FAST-NUCES	