

Deniz Hamamcioglu

Ankara, Turkey | denizhamamcioglu@gmail.com | deniz@hamamcioglu.net | www.hamamcioglu.net

QA Architect & Automation Lead

Professional Summary

Visionary QA Architect and Automation Lead with over 12 years of progressive experience designing, building, and scaling enterprise-level test automation frameworks. Recognized for spearheading complex technical initiatives, including cutting-edge AI/LLM validation systems, low-level embedded firmware testing, and custom device farm architectures. Adept at turning highly technical challenges—such as multi-device ecosystem integration and automated voice validation—into streamlined, automated CI/CD pipelines. Proven track record of mentoring global teams, driving engineering best practices, and ensuring uncompromising quality standards for industry leaders including Google, Amazon (via Bragi), and the United Nations.

Core Competencies & Technical Skills

Test Automation & Frameworks: Playwright, Appium, Selenium, Cypress, WebDriverIO, Pytest, Selenide, Protractor, TestCafe, Robot Framework

Programming Languages: Python, TypeScript, JavaScript, Java, C++, C#, PHP

AI & Advanced Validation: LLM Evaluation (deepeval, Agno, MLflow), AI Failure Analysis, Semantic Entropy / Logprob Calculations

Core Testing Domains: Web Application Testing, Mobile Automation (iOS & Android), Load & Stress Testing

Specialized Testing: Embedded Systems/Firmware Testing, Audio/Voice Command Automation, Medical Device Compliance, Scale Validation

CI/CD, Cloud & Infrastructure: GitLab CI, GitHub Actions, Jenkins, CircleCI, Docker, Azure, CosmosDB, Custom Device Farms

Performance & API: JMeter, k6, Artillery, RESTful APIs, Postman, SoapUI, Authentication Flows, Captcha Bypassing

Professional Experience

QA Lead - ML Ops | Experial (via Toptal)

August 2025 - Present | Germany, Remote

- Architected a robust test and monitoring framework specifically for LLM validation using Python and deepeval.
- Engineered complex evaluation methodologies incorporating custom logprob and semantic entropy calculations to dynamically measure AI model confidence and proactively flag hallucinations.
- Designed and implemented automated UI tests utilizing Python and Playwright, seamlessly integrated into GitHub CI pipelines.

Technologies: Python, Playwright, LLM evaluation, Github, Agno, deepeval, MLflow

Senior Mobile Test Automation Engineer | Bragi GmbH

Feb 2025 - Present | Germany, Remote

- Engineered a custom test automation framework (Python/Pytest/Appium) from the ground up for highly complex embedded audio devices and firmware operations.
- Developed custom frameworks for strategic Amazon projects, ensuring high reliability across iOS and Android ecosystems.
- Innovated an AI-driven failure analysis system capable of parsing screenshots, stack traces, and test steps to autonomously classify failures and determine root causes using scientific confidence metrics.
- Designed fully automated audio testing and voice command validation protocols to detect and verify specific auditory outputs from hardware devices.
- Architected and managed a globally distributed custom device farm combining on-premise infrastructure and worldwide servers, fully integrated with end-to-end CI/CD pipelines in GitLab.
- Orchestrated complex multi-device integrations spanning the Google ecosystem (Gmail, Firebase, Chirp3) and Microsoft Teams.

Technologies: Python, Pytest, Appium, GitLab, AI, Google APIs, MS Teams APIs, Android, iOS, Audio/Firmware Testing

Senior Automation Engineer | Personio (via Toptal)

Jan 2024 - Present | Germany, Remote

- Architected a scalable test automation framework leveraging TypeScript and Playwright for critical web applications.
- Implemented robust automated functional and visual comparison tests to safeguard the UI integrity of the main platform.
- Constructed and optimized CI/CD pipelines in GitLab and in Github for continuous automated test execution and deployment validation.
- Authored comprehensive technical documentation and established test automation best practices across engineering teams.

Technologies: TypeScript, Playwright, GitLab, Github

Senior Test Automation Engineer | Leading Quality Assurance Ltd.

June 2024 - August 2025 | Europe, Remote

- Built a unified test automation framework targeting mobile applications, web admin panels, and backend API endpoints.
- Leveraged BrowserStack to massively scale test execution across a wide matrix of devices and operating systems.
- Integrated the automation suite with CI/CD pipelines (GitHub Actions) and customized Slack reporting for real-time visibility.

Technologies: TypeScript, Appium, WebDriverIO, GitHub Actions, BrowserStack

Lead Software Engineer in Test | Google (via Applause)

Jan 2023 - Present | United States, Remote

- Architected and deployed an end-to-end test automation framework from scratch for high-traffic web and mobile testing domains.
- Led and mentored a specialized team of six engineers to automate the Google Search application for the shopping domain.
- Engineered comprehensive unit, component, and WebDriver tests for Google Travel, aligning manual test logic with automated coverage.

Technologies: TypeScript, Java, Selenium, Unit/Integration Testing, Automated Visual Testing

Lead Automation Engineer | Mesh

Jan 2023 - Aug 2024 | United States, Remote

- Independently designed the overarching test automation architecture for high-stakes API endpoints interfacing with major financial institutions and brokerages.
- Developed a modular Python framework engineered to handle complex authentication flows, captcha bypassing, and comprehensive API/UI coverage.
- Designed the technical framework for rigorous scale validation and led load testing initiatives using JMeter under high-stress conditions.
- Defined and enforced engineering standards including branching strategies, code reviews, and coding conventions.

Technologies: Python, Pytest, GitHub Actions, Playwright, Selenium, RESTful APIs, Captchas, JMeter

Senior Automation Engineer | United Nations (via NTT Data)

Feb 2023 - Aug 2023 | Europe, Remote

- Enhanced and maintained a comprehensive suite of Playwright-based automated tests for mission-critical applications.
- Engineered automated data validation pipelines utilizing CosmosDB.
- Developed extensive load testing protocols with JMeter and authored organizational best practice guidelines.

Technologies: Playwright, JavaScript, JMeter, Azure, CosmosDB

Automation Lead | Actegy / Revitive

May 2022 - Dec 2023 | Europe, Remote

- Architected the complete test automation strategy for a regulated medical device and its corresponding native mobile application (iOS/Android).
- Unified web, API, and mobile testing into a single, cohesive Python-based framework.
- Engineered a custom device farm and configured Jenkins CI pipelines, increasing automated test coverage from zero to over 85%.

Technologies: Python, Appium, Selenium, Pytest, RESTful APIs, Jenkins, Docker, JMeter

QA Manager | Deckers Brands (via Toptal)

Mar 2021 - Oct 2022 | United States, Remote

- Led global quality assurance for 5 major brands across 4 regions, serving tens of millions of daily users.
- Managed, mentored, and scaled a high-performing team of 7 senior QA and automation engineers.

- Resolved critical framework instabilities and flakiness through strategic architectural overhauls of the legacy automation suite.
- Directed enterprise load testing efforts and orchestrated complex release testing processes.
Technologies: WebDriverIO, Playwright, GitLab, JavaScript, BrowserStack, JMeter

Senior Automation Engineer | Haiilo GmbH

May 2020 - May 2022 | Germany, Remote

- Constructed a Java/Selenide/TestNG framework deeply embedded into CI/CD pipelines and adopted company-wide by both Dev and QA teams.
- Authored the strategic test automation roadmap and implemented containerized execution environments using Docker.
Technologies: Java, Selenide, Selenium, GitLab, Docker, REST-assured

QA Engineer | Foreign Credentials Service of America

Dec 2018 - Jan 2025 | United States, Remote

- Transitioned legacy E2E test automation from Protractor to a modernized Playwright framework.
- Identified, debugged, and resolved complex frontend and backend bugs via deep root cause analysis.
- Streamlined CI/CD deployment pipelines utilizing Jenkins and Docker.
Technologies: PHP, JavaScript, Angular, Playwright, Protractor, Docker, Jenkins

Earlier Professional Experience

- Senior Software Engineer in Test | Yara International (via Toptal) | Mar 2021 - Nov 2021
- Senior Automation Engineer | FriendFinder Networks (via Toptal) | Sep 2019 - June 2020
- Senior Automation Engineer | Amadeus IT Group | Jan 2018 - Aug 2019
- Test Analyst | Accenture Industrial Software Solutions | Nov 2016 - Jan 2018
- Software Tester | Havelsan Inc. | Jan 2015 - Aug 2015

Leadership & Advisory Roles

- QA Lead - ML Ops | Experial | 2026 - Present
- Lead Software Engineer in Test | Google (via Applause) | 2023 - Present
- Lead Automation Engineer | Mesh | 2023 - 2024
- Technical Screener, Community Leader, Mentor | Toptal | 2024 - Present
- QA Lead | BNP Media | 2023 - 2024
- QA Lead | Causemetric LLC | 2023

- QA / Release Manager | Brew Interactive | 2019

Education

M.Sc. in Computer Engineering | Başkent University | 2025 - Ongoing

B.S. in Computer Technologies and Information Systems | Bilkent University | 2016

Certifications

- ISTQB Foundation Level – International Software Testing Specialist (2015)