

MEHMET BIYIK

Budd Lake, NJ | EMAIL: mehmet.e.biyik@gmail.com | [LinkedIn](#) | No Sponsorship Required

SUMMARY

Proven Software Development Engineer in Test (SDET), specializing in UI, database (DB), and API testing. Skilled in leading End-to-End (E2E) and 3-layer testing, ensuring data accuracy, system reliability, and high application performance.

SKILLS

Java Testing Frameworks: Maven, Cucumber, Gherkin, JUnit, TestNG

C# Testing Frameworks: .Net, Ranorex, NUnit

Web Automation & Testing: Selenium WebDriver, Selenium Grid, REST Assured, HTML Report, Cucumber JVT Report, Apache ROI

Database and Data Testing: SQL, MySQL, OracleDB, PostgreSQL, H2DB, JDBC, Data-Driven Testing

Testing Methodologies & Tools: Agile & Jira X-Ray, Waterfall, Git, GitHub, Jenkins (CI/CD), Behavior Driven Development, API's Testing, Smoke Testing, E2E Testing, Regression Testing

Languages: Fluent in English and Turkish

EXPERIENCE

System Test Engineer | Canfield Sci, Parsippany, NJ

Nov 2023 – Present

Cloud Systems & User Interface Automation

- Designed and implemented UI automation for cloud-based products, including patient portals, doctor portals, and cloud patient charts.
- Deployed and maintained automation frameworks using C#, Python, Ranorex and QT Squish
- Created cloud demo environments with demo data for company proposals

Medical Devices Software Testing

- Led the testing efforts for two new medical devices, ensuring high-quality software releases.
- Developed and executed UI automation for medical device software using C# and Ranorex, learning and applying new technologies efficiently.
- Conducted regression and medical regression testing to validate functionality and compliance before each release.

Local Service & Data Integration

- Tested and validated the local service responsible for uploading patient data from medical software to cloud systems.
- Ensured data accuracy, integrity, and secure transmission between local and cloud environments.

Key Achievements

- Successfully created and deployed cloud automation, streamlining testing and deployment workflows.
- Established cloud demo environments that improved business proposal presentations.
- Led testing initiatives for new medical devices, ensuring software quality and compliance.
- Quickly learned and implemented C# and Ranorex for medical device UI automation.

Software Development Engineer in Test (SDET) | Customertactic, Tysons, VA

March 2021 – Nov 2023

Data Quality Analysis

- Reduced data-related issues and improved project performance by reviewing end-user quality risks, such as performance issues, user experience challenges, compatibility cross-browser issues, data integrity, reliability issues, third-party dependencies, etc. for an ongoing project, with Java, Maven, RestAssured, Postman, SQL, MySQL, Cucumber, Selenium, JUnit.
- Ensured a seamless user experience by using Selenium WebDriver to perform UI testing; conducted detailed End-to-End (E2E) and 3-layer testing, validating critical data with accuracy and reliability.

Testing Framework Development

- Designed a robust Cucumber Hybrid Testing Framework from scratch; leveraged Java, Maven, Cucumber, and JUnit to improve testing automation efficiency.

Behavior-Driven Development (BDD) Implementation

- Applied behavior-driven development (BDD) via Cucumber and Gherkin language while improving stability via Singleton Design Pattern; drove collaboration between the business and the development teams.

Code Reusability and Testing Efficiency

- Reduced code duplication and improved code maintainability by performing UI-to-DB validation against MySQL using OOP-based reusable methods and classes, ensuring module-to-database alignment.
- Leveraged Page Object Model (POM) pattern with Page Factory and Selenium WebDriver to design page classes; tagged tests in the Feature file for Jenkins CI/CD integration, decreasing test cycle time.

Agile Collaboration and Test Expansion

- Improved project quality by participating in Agile Scrum Meetings and providing insights; expanded test coverage via scenario outlines and JUnit5 parameterized tests.

Reporting and Documentation

- Generated detailed test execution reports via Cucumber HTML Report and the JVT Cucumber reporting plugin, enhancing test result visibility and comprehension.

API Testing and Data Validation

- Maintained high API test coverage rates by identifying and resolving API-related issues via REST Assured, Postman, and basic JavaScript; verified authentication and status code formats of API endpoints with attention to detail.
- Established efficient database connectivity between MySQL DB and the framework using JDBC, increasing data retrieval and management efficiency.

Regression Testing

- Conducted Smoke and Regression testing via Jenkins on AWS EC2 machine with Selenium Grid, identifying and addressing regression issues before production release.

Software Development Engineer in Test (SDET) | Flerativo, Tysons, VA

October 2018- February 2021

Project Analysis and Data Risk Mitigation

- Conducted an in-depth analysis to identify critical data vulnerabilities and potential mitigation strategies inherent in the Fleet project.

Comprehensive Testing and Test Framework Development

- Developed and managed a Cucumber Hybrid Testing Framework from scratch, utilizing Java, Maven, Cucumber, and TestNG, improving test automation efficiency.
- Conducted end-to-end (E2E), 3-layer, Smoke, and Regression testing, identifying, anticipating, and resolving critical defects and executed Data-Driven Testing with scenario outlines to expand coverage against diverse datasets.

User Interface (UI) and Database Validation

- Utilized Selenium WebDriver to validate the UI, ensuring a seamless experience for end-users and resolving 98% of UI-related issues, such as poor navigation, broken links, and redirects, slow page load times, overlapping web elements, etc.; conducted detailed UI-to-DB validation via SQL (DML) and Selenium, ensuring module and database alignment.

API Testing and Data Validation

- Leveraged the REST Assured library to conduct API testing with Java; simultaneously validating driver status data from specific given endpoints, ensuring alignment with expected status codes.

Test Scenario Creation and Reporting Enhancement

- Developed test scenarios based on User Stories using Cucumber and Gherkin, enhancing communication and collaboration between development and testing teams.
- Enhanced test reporting by capturing screenshots of failed test steps via Scenario class enabling defect traceability and faster issue resolution; generated detailed test reports using Cucumber HTML Report.

Database Connectivity and Version Control

- Established database connectivity between Oracle DB and the framework using JDBC, improving data retrieval and management efficiency.
- Leveraged Git as a version control system to manage and track codebase changes on GitHub, ensuring code versioning and improving team collaboration

EDUCATION

Bachelor of Science, Electronics & Communication Engineering | Suleyman Demirel University, Turkey

2021