| Xavier Marchena Calderón

| Full Stack Developer

| Senior QA Automation Engineer

I am a full-stack developer with over 7 years of experience in software development and quality assurance automation. My technical expertise includes proficiency in programming languages such as Python, JavaScript, and Java. With extensive experience in working on complex projects, I have gained a solid understanding of the software development life cycle, from requirements gathering to deployment.

Certifications

-  **ISTQB Certified Tester, Advanced Level Test Automation Engineer (October 23, 2022)**
-  **ISTQB Certified Tester, Foundation Level (May 22, 2022)**

Technical Skills

Languages	JavaScript, TypeScript, Python, Java, Ruby, PHP, C#
Automation	Selenium, Appium, Jest, Playwright, Postman, Artillery, JUnit, Test NG

Software Development	Front-End Development Angular, Ionic Back-End Development Node.js, Flask, SocketIO, Redis, Celery DevOps Docker, Jenkins Script Development Shell Script, Bash Script, Batch Script, PowerShell
Version control	GitHub, Bitbucket, GitLab, Sourcetree
Databases	MySQL, MongoDB, Microsoft SQL
Cloud	AWS, Azure

Professional Experience

Smash | Senior Quality Assurance Automation Engineer, Full Time (Jul 2022 - Present)

Environment: .NET, xUnit.net, C#, Microsoft SQL Server, Azure DevOps, Fiddler, PowerShell

Responsibilities

- Participated in daily stand-up meetings, sprint planning sessions, and sprint retrospectives to ensure that all team members were aligned and that the sprint goals were being met.

- Conducted manual testing to guarantee overall software quality, collaborating closely with development teams to ensure timely development of test cases aligned with software requirements.

- Oversaw test execution during sprints and reviewed the company's test automation solution to guarantee its current and effective.

- Created and maintained test plans, test cases, and test suites in Azure DevOps, ensuring that all tests were properly tracked and executed as part of each sprint.

- Used Fiddler to monitor and analyze API calls made by different applications, generating and sending simulated error responses to assess the applications' error handling capabilities.

RatherLabs | Performance Test Engineer, Part Time Contractor (November 2022 - February 2023)

Environment: **Artillery, Playwright, Node.js, Docker, Postman**

Responsibilities

- Worked with a team at RatherLabs to leverage Artillery, Playwright, and Node.js for the purpose of designing and executing thorough performance tests that identified and addressed key performance bottlenecks in a game under development. Specifically, I used Artillery to simulate load on the game server and Playwright to automate interactions with the game client, ensuring that both the server and client performance were thoroughly tested.

- Containerized the automation code with Docker, enabling test runs on multiple environments. By containerizing the code, I ensured that the test environment was consistent and isolated, which helped to avoid any conflicts with dependencies and configurations that might affect the test results.

- Collaborated closely with the development team to ensure test cases aligned with software requirements and caught issues early in development. This included participating in daily standups, sprint planning meetings, and code reviews, to ensure that the test cases were in sync with the development progress and to identify any potential issues or changes in requirements that might impact the testing process.

- Used Postman to create mock servers based on expected responses, reducing usage of AWS resources. By creating mock servers, I was able to test the API endpoints without relying on the actual AWS resources, which reduced the testing costs and made the testing process more efficient.

- Monitored and analyzed test results using tools such as AWS CloudWatch and Artillery logs. By analyzing the test results, I was able to identify the performance bottlenecks, such as slow API responses or high CPU usage, and work with the development team to optimize the game's performance.

Proximity (10Pearls Company) | Senior Quality Assurance Automation Engineer, Full Time (April 2022 - Jul 2022)

Environment: **Playwright, Artillery, Typescript, Node.js, Postman**

Responsibilities

- Created a proof of concept test automation solution for web browser GUI and API using Artillery, Playwright, and Typescript, which involved setting up the testing environment and installing the necessary libraries and packages.

- Designed and developed automated test cases for both the web browser GUI and API components, which involved analyzing software requirements and designing tests that could validate the functionality of the software.

- Ensured that the automated tests were able to run repeatedly and consistently by configuring the testing framework and resolving any issues that arose during the testing process.

- Focused on API testing using Postman, which involved designing and executing test cases for different endpoints and methods, and verifying that the responses were as expected.

- Utilized Postman's features such as test scripts, collections, and environments to make the testing process more efficient and automated. This included setting up test data using collections and environments, and creating test scripts to automate repetitive tasks.

- Collaborated closely with the development team to identify and resolve any issues related to the API, including issues related to performance, security, and functionality. This involved communicating regularly with the team and sharing test results and logs to help them diagnose and fix issues.

Proximity (10Pearls Company) | Mid-Quality Assurance Automation Engineer, Full Time (Jun 2021 - April 2022)

Environment: **Appium, Ruby, Docker, Jenkins, Jest, Selenium, BrowserStack**

Responsibilities

- Designed and developed a test automation framework for an iOS app using Appium, Ruby, Docker, and Jenkins. This involved creating reusable code libraries, implementing best practices for test automation, and developing a robust test strategy to ensure comprehensive testing of the app across different iOS devices.

- Utilized Appium to automate the testing process for the iOS app, which involved setting up the Appium server, writing test scripts in Ruby, and executing the tests on real devices and emulators.

- Containerized the test automation code using Docker, which allowed for the tests to be run on multiple environments and simplified the setup process for new team members.

- Integrated the test automation framework with Jenkins, enabling the tests to be run automatically on a regular basis, providing early feedback on the quality of the app, and facilitating continuous integration and delivery practices.

- Created automated tests for React applications using Jest, Selenium, and BrowserStack. This involved writing test scripts in JavaScript, utilizing the Jest testing framework, and leveraging Selenium and BrowserStack to run the tests on multiple browsers and devices. The tests were designed to cover different scenarios and user flows, and were executed automatically as part of the build process.

- Collaborated with the development team to identify and fix issues found during the testing process, utilizing tools such as JIRA and GitHub to track and manage issues.

- Conducted code reviews and provided feedback to developers to ensure that code changes were of high quality and aligned with best practices for test automation and software development.

OMNi Costa Rica | Quality Assurance Test Engineer, Full Time (Aug 2020 - Jun 2021)

Environment: **iOS, React, Android, MySQL, AWS, Jenkins, Bitbucket**

Responsibilities

- Conducted manual testing for web and mobile applications to ensure quality and functionality met requirements.
- Performed extensive API testing using Postman, validating API calls and responses to ensure system reliability and consistency.
- Reviewed and executed an automated test suite developed with the Jest framework, ensuring that it met requirements and specifications.
- Developed RPA solutions to automate repetitive tasks and increase efficiency in the testing process.
- Utilized tools such as Git, Bitbucket, Jenkins, AWS, DataDog, Docker to support the testing process and improve workflow.
- Participated in integration testing, regression testing, and production testing to ensure that software met quality standards and performed as expected.
- Covered gaps in functional design specifications and requirements/business rules, ensuring that software was thoroughly tested.
- Analyzed system and business requirement documents, developed corresponding test scenarios, and created and executed detailed test cases in Xray.
- Logged and managed defects in JIRA to ensure they were properly tracked and resolved.
- Worked in an Agile environment, collaborating with developers and other team members to ensure quality and timely delivery of software.

RGT Global | Full Stack Developer, Full Time (Jan 2020 - Aug 2020)

Environment: **Python, Angular, Ionic, MySQL, MongoDB, Redis, Celery, Docker, SocketIO**

Responsibilities

- Developed a Reports API using Python, Flask, NumPy, and Pandas libraries, running in Docker containers. The API allowed users to generate and view reports based on specific data criteria. The API was designed to be scalable and maintainable, with a modular architecture that could accommodate new features easily.

- Developed a mobile client using Ionic for consuming the Reports API. The mobile client was designed to provide a user-friendly interface for viewing reports on mobile devices. It was built using the Ionic framework, which provided a set of pre-built UI components that made it easy to create a consistent and responsive UI across different devices.

- Implemented a payment API for the company's website using Python and Angular. The payment API allowed users to make payments on the website securely. The API was built using Python and Angular, which provided a combination of server-side and client-side capabilities. The payment API was integrated with several payment gateways, to provide users with a wide range of payment options.

- Developed a full-stack MVP for a betting game using Angular, Python, SocketIO, MongoDB, and Celery with Redis, all running in Docker containers. The MVP was designed to provide users with a simple and intuitive interface for playing the betting game. The frontend was built using Angular, which provided a powerful set of UI components and a robust architecture for building complex applications. The backend was built using Python and utilized SocketIO for real-time communication between the server and clients. MongoDB was used as the primary database, providing fast and scalable data storage. Celery with Redis was used for task queuing and processing, providing a highly scalable and fault-tolerant task processing system. All of these technologies were containerized using Docker, making the application portable and easily deployable.

- Utilized Python to perform data analysis on reports and generate insights for business stakeholders. The data analysis was performed using the NumPy

and Pandas libraries, which provided a powerful set of tools for working with data. The insights generated were used by the business stakeholders to make informed decisions about the company's operations.

- Worked closely with the product team to ensure that the developed features met the user's requirements and were delivered within the specified timelines. This involved regular communication with the product team to understand the user's needs and incorporate their feedback into the development process. The Agile methodology was used to ensure that the development process was flexible and could adapt to changing requirements.

QvoTech | QA Automation Engineer, Full Time (Aug 2019 - Jan 2020)

Environment: **Selenium, MySQL, Python, Unittest Linux**

Responsibilities

- Identified and documented detailed requirements for testing system needs and functionality.

- Utilized the Unittest framework for Python and analyzed user stories and acceptance criteria to develop automated tests using Python and Selenium.

- Communicated automation status, measures, issues, and corrective actions during development reviews, effectively working with the development team.

- Performed various types of testing, including API, integration, user acceptance, regression, and production testing, and reported the findings to the team.

- Updated reporting tools with testing results to keep track of progress and identify areas for improvement.

- Utilized Postman to create mock servers to simulate API responses, reducing dependency on external systems.

- Used JIRA to track defects and worked with the development team to ensure timely resolution of issues.

- Developed and maintained testing documentation, including test cases, test plans, and test scripts, to ensure a smooth testing process.

uTest | QA Manual Tester, Freelance (Jul 2016 - Aug 2019)

Environment: **Desktop (Windows, Linux, and Mac), Mobile (iOS and Android)**

Responsibilities:

- Conducted manual testing for web, desktop, and mobile applications across different platforms, including Windows, Linux, Mac, iOS, and Android.
- Tested products across various industries, including education, healthcare, fitness, and media entertainment.
- Executed test cases provided by the client, following testing guidelines and requirements.
- Conducted exploratory testing to find and report bugs that may have been missed by the test cases.
- Worked with various testing tools such as Charles Proxy, and Fiddler to capture and analyze network traffic for web and mobile applications.
- Utilized mobile device emulators and simulators to test mobile applications on multiple platforms.
- Performed compatibility testing to ensure that the products were compatible with different browsers and devices.
- Conducted regression testing to verify that the reported issues were fixed, and new features did not introduce new bugs.
- Interacted with the client through uTest's communication platform to report the testing progress and discuss any issues or concerns.
- Followed uTest's best practices and testing standards, ensuring the quality and consistency of the testing results.
- Provided feedback and suggestions to the clients for improving the products' usability, functionality, and performance.

Universidad de Costa Rica | Software Developer, Full Time Contractor (Jan 2018 - Jan 2019)

Environment: **Docker, Java, PHP, WordPress, LibreOffice, Shell Script, Batch Script**

Responsibilities:

- Conducted research and development on Free Software, identifying and implementing solutions to benefit the university.
- Developed a Java extension for LibreOffice to improve the software's functionality and efficiency for university staff.
- Maintained a WordPress website and created a development environment with Docker to streamline the development process and improve team collaboration.
- Conducted research and development on a multi-platform installer using Java to simplify software distribution and installation across different systems.
- Created and delivered training courses and internal documentation to university staff to increase adoption and usage of the developed tool.
- Worked with university staff to identify pain points and inefficiencies in their workflows and developed solutions to address them.
- Utilized Git for version control and collaborated with a team of developers to ensure the successful delivery of projects.
- Conducted code reviews and provided feedback to improve the quality and maintainability of the codebase.
- Tested and debugged code to ensure functionality and prevent issues from arising in production.
- Utilized Agile methodologies to plan and manage project timelines and deliverables.
- Created technical documentation and user manuals to provide detailed information and instructions on how to use the developed tools.

Tek Experts | Technical Support, Full Time (Aug 2016 - Dec 2016)

Environment: **Windows Server, Linux, Microsoft SQL, Oracle SQL**

Responsibilities:

- Installed HP ALM/Quality Center application on both Windows and Linux environments.
- Configured the application and ensured it was fully functional.
- Troubleshot any issues that arose during the installation process, including resolving installation failures and other issues.
- Provided technical support for installing, upgrading, migrating, and restoring Oracle and SQL databases.
- Worked with clients to understand their needs and provided guidance and assistance with the installation process.
- Assisted users and administrators over the telephone and via email, providing support and troubleshooting guidance to help them resolve any issues they were facing.
- Resolved application errors by researching knowledge bases and reviewing client logs to identify the root cause of the issue and develop a solution.
- Developed scripts and tools to automate repetitive tasks, such as database backups and restores.
- Created and maintained documentation related to installation and configuration processes, troubleshooting guides, and knowledge base articles.
- Collaborated with developers and other team members to identify and resolve complex technical issues.
- Worked with vendors to resolve issues related to third-party tools and components.