SEBASTIAN MORALES

Python Developer

I am an experienced developer specializing in web development with Django and various Python libraries, implementing efficient and scalable solutions. With strong debugging skills and an analytical approach, I effectively identify and resolve issues.

I apply agile methodologies, best practices, and actively engage with clients to analyze requirements and incorporate necessary technical updates.

Additionally, I have expertise in designing and implementing automated testing frameworks using Cypress, Selenium, and languages such as Java, Python, or C#.

SKILLS

| | | JIMILLO | | |
|---------------------|----------------------------------------|------------------------|--------------------------------------|---------------------|
| | | Platforms | | |
| Jira | Confluence | Trello | Postman | Wrike |
| GitHub | GitLab | SourceTree | Browserstack | |
| | | Team Foundation Server | | |
| | | Technologies | | |
| Python | Java | C# | Cucumber | DRF |
| Pytest | Django | Junit | Selenium | JavaScript |
| Git | REST/API | NumPy | Pandas | Docker |
| | Cypress | locust | Jenkins | |
| | | | | |
| | | Databases | | |
| | MongoDB | PostgreSQL | MySQL | |
| | | Others | | |
| Automation | Performance | API Testing | Swagger | Unit Testing |
| | | Agile Methodology | | |
| | | Soft Skills | | |
| Attention to Detail | Analytical Thinking Time Management | Communication | Problem-Solving Stress Management | Flexibility |

As a Python developer, I am a proactive and persistent professional with strong analytical and problem-solving skills. I pay meticulous attention to detail and thrive in high-pressure environments. I excel in communication, collaborating effectively with colleagues and clients. My organizational skills and ability to prioritize tasks ensure timely completion of projects. I possess technical expertise in utilizing diverse testing tools and strategies, and I also demonstrate leadership qualities in guiding my team. Furthermore, I have excellent documentation skills, presenting findings concisely and clearly.

WORK EXPERIENCE

Banco de Costa Rica (BCR) – Encora Client Quality Assurance Engineer

MEDELLÍN, COLOMBIA (Jun 2022 – Current)

Banking software

During this time, I participated in the following tasks:

Automation

Create an automation framework in C# with Selenium and POM design pattern that contains all the specifications required for the projects to be able to standardize automation testing and automate the happy path tests, regression tests, negative tests, performance tests, end-to-end testing, and others.

- Use MSTest to create and run the test cases.
- Automate API testing using requests library to verify the functionality and performance of it.
- Create a custom HTML reporting and logging mechanisms to track successful, interrupted, failed tests results and performance metrics with their execution times.
- Data creation directly to the data base using SQL queries.
- Implementation of parallel test execution to speed up the testing process.
- Implementation of a centralized data repository for test data management.
- Creation of reusable functions and libraries for commonly used actions and flows.
- Collaborated with the development team to ensure that defects, changes, and new features were resolved in timely manner.

Technologies: C#, Selenium, POM, MSTest, HTML, JavaScript, Visual Studio, Appium, Specflow.

API Testing

Conducted API testing on the banking software to ensure that the different components of the system were integrated and worked together seamlessly.

- Use Postman to test the API's functionality.
- Validated the API's response time and performance.
- Reported and tracked defects using TFS.
- Collaborated with the development team to ensure that defects were resolved in timely manner.

Technologies: Postman, Team Foundation Server (TFS), Webex, Microsoft Teams.

Manual and Functional Testing

Conducted manual testing on the banking software to ensure that it met the requirements and specifications set by the client.

- Create test plan and test cases, and the data to be tested.
- Performed black box, end-to-end, limit value, happy path, monkey, and negative testing.
- Reported and tracked defects using TFS.
- Collaborated with the development team to ensure that defects were resolved in timely manner.
- Participated in the review and validation of the software prior to release.

<u>Technologies:</u> Team Foundation Server (TFS), Webex, Microsoft Teams.

GreenSlate – Encora Client Python dev and QA Engineer

MEDELLÍN, COLOMBIA (Dec 2021 – May 2022)

Payroll Software Company

During this time, I participated in the following tasks:

Python developer (Dec 2021 – May 2022)

Create an automation framework in Python with Selenium and ScreenPlay design pattern that contains all the specifications required for the projects to be able to standardize automation testing and automate the happy path tests, regression tests, negative tests, performance tests, end-to-end testing, and others.

- Use Pytest to create and run the test cases.
- Automate APIs.
- Use AllureReports.
- Data creation directly to the data base using SQL queries.
- Implementation of parallel test execution to speed up the testing process.
- Implementation of a centralized data repository for test data management.
- Creation of reusable functions and libraries for commonly used actions and flows.
- Collaborated with the development team to ensure that defects, changes, and new features were resolved in timely manner.
- Develop and maintain a robust testing security framework using Python.
- Performance testing using locust.

Create scripts Create scripts that facilitate daily tasks, in addition to performing analysis on large amounts of data.

- Write Python scripts to automate repetitive tasks and streamline daily operations for increased efficiency.
- Utilize Python libraries such as Pandas and NumPy to analyze large datasets, extract insights, and generate reports.
- Clean and preprocess data using Python to ensure data quality and consistency before analysis.
- Write robust code with proper error handling techniques to ensure script reliability and troubleshoot any issues that may arise.
- Optimize the performance of Python scripts by implementing efficient algorithms, utilizing data structures, and optimizing code.
- Work closely with other teams, such as data scientists or business analysts, to understand their requirements and provide Python-based solutions to support their needs.
- Document the codebase, including scripts and data analysis processes, to ensure clarity, maintainability, and knowledge sharing among team members.

• Automation and Manual Testing (Dec 2021 - May 2022)

Conducted functional testing on the banking software to ensure that it met the requirements and specifications set by the client.

- Create test plan and test cases, and the data to be tested.
- Performed black box, end-to-end, limit value, happy path, monkey, and negative testing.
- Reported and tracked defects using Wrike.
- Collaborated with the development team to ensure that defects were resolved in timely manner.
- Participated in the review and validation of the software prior to release.

Conducted API testing on the banking software to ensure that the different components of the system were integrated and worked together seamlessly.

- Use Postman to test the API's functionality.
- Validated the API's response time and performance.
- Reported and tracked defects using Wrike.
- Collaborated with the development team to ensure that defects were resolved in timely manner.

<u>Technologies:</u> Postman, Slack, Wrike, SQL Server Management Studio (SSMS), Citrix, Excel, Selenium, Cucumber, BDD, Python, Screenplay, Postman, Pytest, HtmlTestRunner, AllureReports, NumPy, Pandas.

FUNDACIÓN AGUA VIVA Developer and QA Engineer

MEDELLÍN, COLOMBIA (Jan 2021 – Dec 2021)

Educational institution and Ecommerce

During this time, I participated in the following projects:

Moodle and WordPress CRM and ERP integrations (July 2021 – Dec 2021)

Implemented a CRM system for an educational institution that integrates data from Moodle and WordPress platforms to provide a centralized and organized view of student and course information.

✓ Main tasks as Dev executed in the project:

- Developed the application using Python, Django, Django Rest framework and React.
- Design the application architecture, develop models, api views and api urls or router.
- Implemented integration with Moodle APIs and WordPress database to extract student and course data.
- Create and manage the database using Django ORM.
- Develop application business logic, this may include implementation of algorithms, validation rules, data processing, and any other operations necessary for the application to function properly.
- Develop API endpoints using DRF. This involves defining endpoints, managing authentication and authorization, and ensuring proper data handling.
- Created a custom user-friendly interface to display the data in a clear and organized manner.
- Perform unit and integration tests to ensure that the application works correctly. Also, fix bugs and debug issues when they arise.
- Added functionalities such as student and course management, enrollment tracking, and reporting.
- Implemented a role-based access system to restrict access to sensitive data.

<u>Technologies:</u> Python, Django, Django Rest Framework, PHP, React, Swagger, JavaScript, Postman, Moodle, WordPress, Jira, Corsheaders.

✓ Main tasks as QA executed in the project:

- Developed test cases to ensure the integrity and accuracy of the data being pulled from Moodle and WordPress
- Created the cases for the system functionality, usability, and performance.
- Performed API testing using Postman to validate the integration between the CRM system and the Moodle and WordPress platforms.
- Keep an eye on regression test runs, to ensure that new changes did not break existing functionality.
- Participated in user acceptance testing with the client to ensure that the system me their requirements.

Help the QA team to automate the test cases with Cypress.

Technologies: Cypress, Jira, Postman.

• E-Learning education platform using Moodle (Jan 2021 – July 2021)

Used Moodle to create a virtual education platform, including course management, enrollment tracking, and reporting features.

- ✓ Main tasks as dev executed in the project:
- Configured and customized the Moodle platform to meet the client's requirements.
- Implemented features such as course management, enrollment tracking, and reporting.
- Integrated the platform with third-party tools and services such as payment gateways and email marketing platforms.
- Implemented a responsive design to ensure optimal user experience on different devices.

Technologies: PHP, Moodle, JavaScript, HTML, CSS, Jira.

ESSTRATEGIA - Esstrategia Developer and QA Engineer

MEDELLÍN, COLOMBIA (Jan 2019 – Dec 2020)

Occupational health and safety education and services During this time, I participated in the following projects:

• Sentinel (Medical Qualification Software - Origin Qualification) (Jan 2019 - Dec 2020)

Developed a medical qualification software using natural language processing (NLP), support vector machines (SVM), and decision tree algorithms to determine the origin qualification of medical conditions.

- ✓ Main tasks as dev executed in the project:
- Researching and implementing NLP techniques to process and analyze medical reports and documents. This involved leveraging Python libraries such as TensorFlow, NumPy, and Pandas to handle the data.
- Developing SVM and decision tree models to classify the origin of medical conditions. I utilized machine learning algorithms within the scikit-learn library to train and optimize these models.
- Implementing a system for tracking and reporting the results of the qualification process. This
 involved designing a database schema and using Django, a Python web framework, to create a userfriendly interface to visualize the application.
- Collaborating closely with the medical team to ensure the accuracy and effectiveness of the software. This involved gathering feedback, conducting testing, and making improvements based on their insights.

<u>Technologies:</u> Python, Django, TensorFlow, NumPy, Pandas, numba, NLP, SVM, Decision Tree, JavaScript

MAESSTRIA – Esstrategia Client Developer and QA Engineer

MEDELLÍN, COLOMBIA (Feb 2018 – Dec 2019)

Educational B-learning institution

During this time, I participated in the following projects:

• CRM for user management (Jan 2019 – Dec 2019)

Developed a CRM system to assist in the entire user management process, from the first contact to converting them into customers by purchasing a diploma or course. The system also automated the process of data collection from free lectures given by doctors in the occupational health and safety (OSH) area.

✓ Main tasks as dev executed in the project:

- Developed the system using Python and Django.
- Implemented integrations with various platforms such as email and social media to collect user information.
- Created a custom user-friendly interface to display the data in a clear and organized manner.
- Added functionalities such as lead management, enrollment tracking, and reporting.
- Implemented a role-based access system to restrict access to sensitive data.

Technologies: Python, Django, JavaScript, Postman, Jira

✓ Main tasks as QA executed in the project:

- Developed test cases to ensure the integrity and accuracy of the data being collected from various platforms.
- Created test cases for the system's functionality, usability, and performance.
- Performed API testing using postman to validate the integration between the CRM system and various platforms.
- Participated in user acceptance testing with the client to ensure that the system meets their requirements.
- Helped the QA team to automate the test cases with Cypress.

<u>Technologies:</u> Python, Cypress, Jira, Postman

• E-Learning education platform using Moodle (Feb 2018 – Dec 2018)

Developed an E-Learning education platform using the Moodle platform.

✓ Main tasks as dev executed in the project:

- Customized and configured the Moodle platform to meet the client's requirements.
- Implemented various functionalities such as course management, enrollment tracking, and reporting.
- Integrated the platform with various third-party tools such as payment gateway and email marketing.
- Developed custom plugins and modules to enhance the functionality of the platform.

Technologies: PHP, JavaScript, Moodle, Jira

✓ Main tasks as QA executed in the project:

- Developed test cases to ensure the integrity and accuracy of the data being collected from various platforms.
- Created test cases for the system's functionality, usability, and performance.
- Performed API testing using postman to validate the integration between the CRM system and various platforms.

- Participated in user acceptance testing with the client to ensure that the system meets their requirements.
- Helped the QA team to automate the test cases with Java and Selenium.

<u>Technologies:</u> Java, Selenium, Screenplay, JUnit, JMeter, BDD

EDUCATION

| University | | |
|-------------|--------------------------|-----------------------|
| 2021 – Now | Systems Engineer Student | U. Católica del Norte |
| 2018 - 2020 | Systems Engineer Student | U. Eafit |

| Machine Learning | | |
|------------------|----------------------------------------------------------------|------------------|
| 3-Jun-22 | Python for non-mathematicians: From 0 to facial recognition | <u>Udemy</u> |
| 3-Jun-22 | Python-Introduction to Data Science and Machine learning A-Z | <u>Udemy</u> |
| 25-May-22 | Microsoft Certified: Azure AI Fundamentals | <u>Microsoft</u> |
| 20-Apr-21 | BERT | <u>Udemy</u> |
| 10-Dec-20 | NLP | <u>Udemy</u> |
| 27-Nov-20 | Machine Learning with Python | <u>Udemy</u> |

| Python | | |
|-----------|----------------------------------------------------------|--------------|
| 3-Jun-22 | Python University with Frameworks Django, Flask, etc. | <u>Udemy</u> |
| 11-Jun-21 | Python 3 Master Course: Learn from Scratch | <u>Udemy</u> |

| Python Django | | |
|---------------|--------------------------------------------------------------------------|--------------|
| 3-Jun-22 | Django with React An Ecommerce Website | <u>Udemy</u> |
| 24-Oct-21 | Course Django and Django rest framework from basic to professional | <u>Udemy</u> |
| 16-Sep-20 | Purchase and Billing System with Python using Django LTS | <u>Udemy</u> |
| 26-May-20 | Django Hands-On Course: Backend Web Development with Python | <u>Udemy</u> |

| Java | | |
|----------|----------------------------------------------------------|--------------|
| 3-Jun-22 | Java University - From Zero to Expert - More Complete | <u>Udemy</u> |

| JavaScript | | |
|------------|-----------------------------------------------------------|--------------|
| 3-Jun-22 | JavaScript University - From Zero to JavaScript Expert | <u>Udemy</u> |

| QA Automation | | |
|---------------|-----------------------------------------------------------------|----------------|
| 2018 | Selenium with Java and Cucumber: The definitive Course | Udemy |
| 2018 | QA Automation with Serenity Course - From novice to expert! | Udemy |
| 2018 | UI Automation with Serenity BDD (Selenium, Cucumber, Junit) | Udemy |
| 2018 | WEB Automation - SerenityBDD cucumber Screen Play Java | <u>YouTube</u> |
| 2018 | Selenium with Python Behave (BDD) | <u>YouTube</u> |
| 2018 | Python with Selenium Course | <u>YouTube</u> |

LANGUAGES

Spanish: Native **English:** B2