Mohsen Fakhari

Software Developer

Address Vienna, 1200 Vienna
Phone 068181359030
E-mail fmohsen22@gmail.com
Linkedin: linkedin.com/in/mohsenfakhar-80a044121
Github: https://github.com/fmohsen22?tab=repositories

Experienced Software Developer with a strong foundation in Java, Python, and automation frameworks. Skilled in designing scalable, user-centric solutions and optimizing development workflows. Passionate about leveraging programming and problem-solving to deliver high-quality software.

💼 Work History

Oct 2021 - Current

Software Developer / Software developer in Test
QESTIT, Vienna, Austria

Position: Consultant
Projects:
1-SVC (Austrian Health System)

- **Simulator Development**: Designed and developed a card simulator connected to a REST API and Oracle database. The simulator replicated card insertions, withdrawals, and data processing, streamlining manual testing processes and environment management. It supported testers by simulating real-world scenarios and validating doctor and patient data workflows.
- **Test Environment Automation:** Created batch scripts to set up and manage test environments, simplifying testers' tasks when working with Tosca.
- **Developed a Java-based test automation platform** using TestNG that dynamically parses test data from Excel files, executes test cases, and generates comprehensive HTML reports, reducing testing time from 2 days to under a minute. The platform supports multiple input formats (Excel, CSV, text files), batch processing, and integrates seamlessly with Jenkins pipelines for automated CI/CD workflows. Built with technologies like Java, TestNG, Apache POI, and Jenkins, it is extensible for integration with tools such as SOAPUI, Tosca, and future AI-driven testing enhancements.
- **API Development**: Contributed to the development of RESTful APIs using Spring Boot for various applications within the healthcare system, including secure authentication mechanisms using OAuth2 and JWT.
- **CI/CD Integration:** Developed tools integrated with Jenkins to automate deployment checks and run post-hotfix validations, ensuring smooth and reliable software releases.

- **Frontend**/Other Tools: Basic knowledge of HTML, CSS, JavaScript, TypeScript, and GraphQL (learning stage).

2-ÖBB (Austrian Federal Railways):
- Developed a **desktop application** to automate the validation of train schedules generated by ÖBB's Fahrplanung (schedule planning) application. The app compared XML-based outputs from the reference (legacy) system with the new system under development, ensuring accuracy in train timings, routes, station stops, and train types. The complex XML structure, involving thousands of nested nodes, required a fully customized solution to parse, compare, and summarize data effectively. Built using Java, the application provided detailed comparisons, enabling efficient validation of scheduling accuracy across Austria's rail network.

Feb 2019 - Sep 2021

Software Developer in Test
BVAEB, Vienna, Austria
- Designed and developed UI automation frameworks and test scripts using Java, Selenium WebDriver, and JUnit, focusing on scalable and maintainable solutions for web applications.
- Built and optimized backend validation workflows to ensure data integrity, automating complex database manipulations using batch processing techniques.
- Designed and implemented RESTful APIs for secure and reliable backend communication, ensuring seamless integration between services.
- Managed and enhanced CI/CD pipelines using Jenkins, integrating automated tests and deployment processes for faster delivery cycles.
- Conducted cross-browser testing and resolved UI inconsistencies to deliver a consistent user experience across platforms.
- Leveraged tools like Zephyr and JIRA for test case management and progress tracking, improving project collaboration and transparency.
- Reduced manual workflows by 60% through Java-based automation, contributing to increased efficiency and reliability in software delivery.

Aug 2015 - Dec 2018

Petroleum Engineer (Research & Development)
Department Petroleum Engineering, Leoben, Austria
- **Sand control and scaling Research:**
  - Designed and built a test flow loop to replicate field production processes, enhancing oil and gas production through optimized gravel packing and advanced data analysis.
  - Innovated a glass beads gravel aching system with OMV and Swarco, improving permeability and reducing scaling.

- **Energy Recovery and Oil & Gas Production Enhancement:**
  - used Pipesim to identify optimal operating conditions in depleted reservoirs and consulted oil companies on efficient pump replacement strategies.

- **Oil-Water Separation and Emulsion Challenges:**
  - Engineered solutions for achieving efficient oil-water separation using ultrasound and chemical methods, enhancing process efficiency in production facilities.
  - Developed techniques to overcome emulsion-related bottlenecks in surface facility designs, leading to improved operational efficiency.

Education

Oct 2012 - May 2014

Master of Petroleum Engineering
University of Leoben - Leoben, Austria
Thesis: Evaluation of Hydrophobic Coated Glass Beads for Utilization in Gravel Pack.

Accomplishments

- ISTQB foundation level - ISTQB - International Software Testing Qualifications Board
- Certified professional for requirement Engineering - IREB
- EdX Verified Certificate for How to Code: Simple Data - The University of British Columbia
- EdX Verified Certificate for Data Science: Machine Learning - Harvard University
- EdX Verified Certificate for Analyzing and Visualizing Data with Power BI - Microsoft
- EdX Verified Certificate for Introduction to Python for Data Science - Microsoft
- Automation Specialist Level 1 & 2 - Tricentis

Skills

- Programming Languages: java, Python
- Backend Technologies: Spring Boot, RESTful APIs, OAuth2, JWT
- Databases: MySQL, PostgreSQL, Oracle, NoSQL
- CI/CD Tools: Jenkins, Docker, Kubernetes (learning)
- Testing and Automation: Selenium, TestNG, SoapUI
- Other Tools: Apache POI, Jira, Confluence
- Frontend: HTML, CSS, JavaScript (basic knowledge)