

Summary

- Experienced software developer specializing in automation, quality assurance, and delivering business value through innovative solutions.
- Proficient in the full software development lifecycle, from initial design to deployment, with a strong focus on test automation and iterative improvement in Agile environments.

"Derek is an excellent partner in software development, skilled at both software design and test automation. He seeks clarity through questions and learning, regularly finding improvements and working with the team to implement them." - Chris Haverkate, Senior Developer, Digimarc

Experience

February 2023 - Current

Wegmans, Remote Work – *QA Engineer / Software Developer*

- Implemented automated end-to-end testing frameworks using C# and the Azure SDK, improving test coverage and reducing manual effort across teams.
- Provided mentorship and leadership in adopting test automation practices, fostering a quality-focused engineering culture.
- Designed and developed scalable software solutions and features using C#, ensuring robust testing protocols and high-quality deliverables.
- Optimized Infrastructure as Code (IaC) processes by updating YAML and Bicep files to streamline cloud infrastructure deployment.

November 2021 - February 2023

Digimarc, Remote Work – *QA Engineer / Software Developer*

- Enhanced the quality and performance of embedded device software by developing C++ and Python-based solutions for parsing and generating watermarks and barcodes.
- Implemented automated validation frameworks to support a high-profile, multi-million dollar customer project involving machine learning-driven instance segmentation technology.
- Championed the use of mocking libraries to improve testing practices, leading team training sessions and enhancing unit test reliability.

February 2018 - November 2021

Paychex, Rochester NY – *Automation Engineer*

- Automated complex disaster recovery procedures using Bash, PowerShell, Python, and other scripting tools, reducing manual effort and increasing reliability across teams.
- Developed and maintained UI automation solutions leveraging Selenium and an in-house automation framework, ensuring consistent and scalable test coverage.

- Integrated with various REST and SOAP APIs, including JIRA, Foreman, Tidal, MongoDB, and VMSphere, to streamline workflows and improve system integration.
- Created a custom Python Integration Test Framework, led team adoption, and provided training to enhance testing capabilities and collaboration.

July 2016 - January 2018

CloudCheckr, Rochester NY – *Software Developer*

- Spearheaded the adoption of unit testing within the organization, growing test coverage from 0 to over 3,000 unit tests within a year and integrating it as a core component of the development workflow.
- Trained and mentored developers on the importance and implementation of unit testing, embedding it into pull request requirements and user story acceptance criteria.
- Designed and implemented new features, performed unit and integration testing, and resolved critical bugs for a platform that provided cloud monitoring and reporting for AWS and Azure.
- Leveraged C# .NET 4.6 Framework, MVC ASP.NET, JavaScript, and SQL to deliver high-quality software in an Agile environment, enabling customers to optimize their cloud usage and identify cost-saving opportunities.

August 2013 - June 2016

Buyquest, Rochester NY – *Software Developer*

- Automated critical business procedures in NetSuite and WooCommerce using server-side JavaScript and Python, increasing operational efficiency.
- Collaborated with fellow developers to establish and document standardized software development best practices, creating a reference for scalable and maintainable code.

Areas of Expertise

- *Languages:* Python, C#, Java, Javascript, C++, Bash, SQL, RegEx, CSS, HTML
- *Tools:* Visual Studio, IntelliJ, Bitbucket, Git, Office, Docker, Notepad++
- Specialized in improving code quality through automation, mentorship, and best practices adoption.

Projects

XMage

- Contributed to an open-source application written in Java for playing Magic: The Gathering online, expanding its feature set and improving usability.
- Implemented new card functionalities and enhanced the automated test suite, increasing reliability and code coverage.
- Engaged with the user community to gather feedback, resolve reported bugs, and communicate upcoming features and fixes.
- Collaborated with other contributors to refine development workflows and ensure the project's long-term maintainability.

Education

Rochester Institute of Technology – *Bachelor of Science in Information Technology*

Monroe Community College – *Associate of Arts, Liberal Arts and Sciences – Humanities and Social Science*