



VIKTOR RALCHENKO

SENIOR SOFTWARE DEVELOPER

Senior Software Developer with 20 years of hands-on experience delivering reliable, scalable, and business-critical solutions. I specialize in **backend architecture**, **microservices**, and high-performance data platforms using **C#**, **.NET (Core & Framework)**, **MS SQL**, and **Oracle**. My work has directly improved system stability, reduced production defects, and accelerated release cycles across multiple domains — from industrial automation to **CMS** platforms.

I've led the development of robust **APIs**, engineered custom test utilities, and authored over 700 **automated tests** using **Playwright**, achieving 80%+ code coverage and cutting regression time by 60%. My contributions span legacy modernization (**VB.NET**, **WinForms**), cloud-native services (**AWS**, **Azure**), and frontend development with **React**, **Angular**, and **Vue.js**.

My workflow is grounded in **DevOps** best practices (**CI/CD**, **Git**, **Docker**, **Jenkins**) and enhanced by **AI-assisted development** and quality assurance. I thrive in agile environments, support team collaboration, and consistently deliver high-quality software that meets business goals and user expectations.

EXPERIENCE

SENIOR QUALITY ASSURANCE AUTOMATION ENGINEER

Self-employed

February 2025 - Present

- Ensured system reliability by performing comprehensive end-to-end black-box testing across a complex microservices architecture, proactively identifying integration issues before production.
- Designed and implemented a scalable test automation framework using Node.js and Playwright, achieving over 80% code coverage and reducing regression testing time by 60%.
- Authored and maintained more than 700 automated tests, covering critical business flows and edge cases, which significantly reduced production defects and improved release confidence.
- Streamlined the QA lifecycle by managing test planning, execution, and reporting in Qase, improving transparency and traceability across sprints.
- Accelerated bug resolution through tight collaboration with developers via Jira and real-time coordination in Slack, shortening feedback loops and increasing team efficiency.
- Enhanced CI/CD reliability by engineering custom test utilities for complex validation scenarios, strengthening the quality gates in automated pipelines.
- Tech Stack used:** Node.js, Playwright, Qase, Jira, Rider, Slack, TypeScript.

SENIOR SOFTWARE ENGINEER

Bystronic Group

October 2023 - February 2025, Niederönz

- Enabled seamless integration of industrial hardware by developing robust connectors and adapters for laser cutting and bending machines, directly supporting the company's Data Platform and improving operational efficiency.
- Delivered reliable backend services by designing and implementing ASP.NET Web APIs, thoroughly tested with Postman to ensure functional accuracy and system stability.
- Accelerated release cycles by setting up CI/CD pipelines in Azure DevOps, automating deployments and reducing manual overhead across environments.
- Improved sprint planning and execution through active participation in agile refinements, contributing to precise story breakdowns, estimations, and smoother development workflows.
- Maintained production stability by proactively debugging and resolving live issues, minimizing downtime and ensuring consistent application performance.
- Strengthened code quality and test reliability by applying unit testing with XUnit, leveraging Moq, Fixture, and FluentAssertions to achieve extensive coverage and early defect detection.

SKILLS

- Programming Languages:** C#, TypeScript, Python, Node.js
- Frameworks:** .NET (6-8), ASP.NET Core, Web API, WebForms
- Frontend Development:** React.js, Angular, Vue.js, TypeScript, JavaScript, Material-UI
- Architecture:** Microservices, Clean Architecture, Domain-Driven Design, Single Responsibility Principle (SRP)
- Databases:** SQL Server, PostgreSQL, Oracle, SQLite, LINQ, ADO.NET, Entity Framework Core
- Cloud & DevOps:** Azure, AWS, Vercel, Render, Cloudinary, Docker, CI/CD, GitHub Actions, Azure DevOps
- Testing:** Playwright, xUnit, MSTest, Moq, Test Automation
- Tools:** Git, TFS, SVN, Jira, Confluence, Visual Studio, Rider, VS Code

EDUCATION

MASTER'S DEGREE IN COMPUTER SYSTEMS AND NETWORKS (DIPLOMA WITH HONOR)

National State Polytechnic University

1996 - 2002

SECONDARY SCHOOL DIPLOMA

Secondary School No. 29, Chernihiv
1986-1996

LANGUAGE

- English: C1 (Professional Working Proficiency)
- German: B1 (Limited Working Proficiency)
- Ukrainian: C2 (Native)
- Russian: C2 (Fluent)

HOBBIES

- Table tennis
- Mini-golf
- Hiking

- Worked across a diverse tech stack, including .NET Core/.NET 6-8, Python, Vue.js, Node.js, TypeScript, SQL Server, LiteDB, Azure, Docker, and Unix-based systems — demonstrating adaptability and cross-functional engineering capability.
- Tech Stack used:** VS2022, Visual Studio Code, C#, .NET Core & .NET (versions 6-8), Python, VueJs, Node.js, TypeScript, SQL Server, LiteDB, Azure, Postman, Ubuntu (Unix) and Docker.

SENIOR FULLSTACK SOFTWARE ENGINEER

UUUSoftware.com

April 2021 - July 2023, Canada

- Led backend development for a CMS system using C#, .NET Framework, .NET Core, AWS, Jenkins, Oracle, and Angular.
- Enhanced existing .NET applications by adding new functionality to improve their capabilities and user experience.
- Provided key development support for microservice-based projects.
- Contributed to increasing unit test code coverage to improve overall code quality.
- Identified and resolved performance bottlenecks in ASP.NET applications.
- Implemented comprehensive unit tests using xUnit, Moq, and FluentAssertions to ensure backend reliability.
- Tech Stack used:** C#, .NET Core & Framework, Microservices, AWS, Jenkins, Oracle, Angular, xUnit.

SOFTWARE ENGINEER

Axxos

January 2018 - March 2021, Sweden

- Implemented complex filtering, sorting, and paging functionalities in an ASP.NET Core web application.
- Created Windows services to process and transfer data from XML files into a database, implementing custom validation and business logic.
- Maintained and enhanced a legacy ASP.NET WinForms application in VB.NET, adding new features and fixing bugs.
- Conducted performance tuning of SQL Server, optimizing complex queries and stored procedures.
- Developed frontend features using React.js.
- Assisted the team lead with task assignment, quality assurance, and fostering team collaboration to meet project deadlines.
- Tech Stack used:** ASP.NET Core, C#, VB, SQL Server, React.js, VB.NET, WinForms, XML.

WEB SOFTWARE ENGINEER (PART-TIME)

Vocabnetwork

Apr 2016 – Apr 2020, USA

- Responsible for implementing new features for the web platform.
- Diagnosed, resolved, and tracked software defects and production issues to ensure application stability.
- Managed application deployments and release cycles.
- Tech Stack used:** ASP.NET, ASP.NET MVC, ASP.NET AJAX, Web Services API, Microsoft SQL Server, Stored Procedures, React.js, HTML, CSS.

WEB DEVELOPER

Svitla Systems

Aug 2013 – Dec 2017, USA

- Led design and programming tasks for projects utilizing a tech stack of ASP.NET MVC, Web API, and Angular.
- Responsible for the development of project architecture.
- Designed and implemented database schemas and stored procedures using T-SQL on MS SQL Server 2012.
- Contributed to the full project lifecycle, from formulating technical specifications to preparing effort and duration estimates for development tasks within an Agile/Scrum methodology.
- Performed bug fixing and troubleshooting to ensure application stability.
- Tech Stack used:** C#, .NET, Angular, SQL Server, EF, LINQ, JS, HTML/CSS, SVN.

SENIOR C# AND SQL DEVELOPER

Volia Software

Feb 2010 – Jul 2013, USA

- Responsible for implementing new features for the web platform.
- Diagnosed, resolved, and tracked software defects and production issues to ensure application stability.
- Managed application deployments and release cycles.
- Tech Stack used:** ASP.NET, ASP.NET MVC, ASP.NET AJAX, Web Services API, Microsoft SQL Server, Stored Procedures, React.js, HTML, CSS.

PROJECTS & ACHIEVEMENTS

Item Flow – Full-Stack TypeScript Application

Oct 2025, Wallisellen

- Live Demo: [item-flow-rho.vercel.app](#)

- GitHub Repo: [github.com/vralchenko/ItemFlow](#)

A comprehensive full-stack project demonstrating modern development practices from conception to deployment.

- Implemented a responsive design using Material-UI's sx prop, ensuring a seamless user experience across mobile and desktop devices.
- Integrated Cloudinary for cloud-based image storage, moving beyond local file handling to a scalable, production-ready solution.
- App deployed via modern CI/CD: frontend on Vercel, backend on Render, fully automated with GitHub Actions.
- Tech Stack used:** Node.js · React.js · Playwright · REST APIs · TypeScript · Cloudinary · Vercel · Render · GitHub Actions · Material-UI

NASA Space Apps Challenge Participant

Oct 2025, Zurich

- Collaborated in an international team during a 48-hour hackathon to solve a real-world challenge presented by NASA.
- Contributed to the development of a meaningful project prototype by blending technology, science, and space-related data.