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AI QA INTEGRATION | AUTOMATION & PERFORMANCE ENGINEERING | SOFTWARE ENGINEERING

SUMMARY

Software Engineering and QA Automation leader with 10+ years of experience spanning software development, quality engineering, test automation, performance engineering, and engineering management. Experienced in integrating AI into QA and SDLC workflows to accelerate test design, automation, code generation, defect analysis, and release validation.

Proven track record of building scalable automation platforms, modernizing legacy systems, and leading teams through automation transformation. Built automation solutions covering 4,000+ test cases across multiple applications and services, increasing automation coverage from approximately 15% to 85% and reducing regression execution from days to hours.

Hands-on experience with AI-assisted test generation, AI code development, GitHub Copilot, agent-based workflows, MCP, Playwright, TypeScript, C#, Java, REST APIs, Azure DevOps, CI/CD, SQL, and performance engineering. Strong ability to bridge AI capabilities with existing QA processes and translate emerging AI technologies into practical engineering solutions.

CORE EXPERTISE

AI & QA Integration: AI-assisted test case generation; AI-driven test automation; AI integration into SDLC / QA workflows; AI code generation and code review; AI-assisted requirements and acceptance-criteria analysis; AI agent orchestration; MCP / Model Context Protocol; GitHub Copilot; AI evaluation and validation; human-in-the-loop QA workflows

Test Automation & Quality Engineering: Playwright; Selenium; Cypress; WebdriverIO; Protractor; TypeScript; JavaScript; C#; Java; Cucumber / BDD; UI, API, integration, regression and end-to-end testing; Allure

Performance Engineering: JMeter; load and performance testing; parallel test execution; performance analysis and optimization; SQL / stored procedure optimization

Engineering & DevOps: Azure DevOps; CI/CD; REST APIs; Swagger / OpenAPI; OAuth2; SOAP-to-REST modernization; Git; .NET; SQL

PROFESSIONAL EXPERIENCE

AUTOMATION & PERFORMANCE QA MANAGER / SOFTWARE ENGINEER

RegEd | Oct 2024 – Present

- Lead a team of approximately 15 engineers responsible for automation, performance engineering, and quality initiatives.
- Drive the integration of AI into QA and SDLC processes, including AI-assisted test generation, test analysis, automation development, and quality validation.
- Designed and implemented scalable Playwright + TypeScript automation architecture, increasing automated test coverage from approximately 15% to 85%.
- Built and maintained 4,000+ automated test cases across 4 applications/services and multiple environments.
- Reduced regression testing from approximately 2 days of manual execution to ~6 hours through automation.
- Reduced automated execution time by approximately 80% through Playwright parallelization and Azure DevOps CI/CD integration.
- Developed an AI-assisted test generation workflow capable of producing an initial set of test cases in approximately 30 minutes, significantly accelerating test design.
- Evaluated AI-generated test scenarios using automated and human review processes to identify missing coverage, duplicates, and low-value cases.
- Integrated AI-assisted development tools into the engineering workflow, including GitHub Copilot and AI coding/agent tools.
- Investigated and implemented MCP-based AI workflows to connect AI agents with development and QA tooling.
- Partnered with engineering leadership to explore AI throughout the SDLC, including requirements analysis, test generation, automation, validation, and release quality.
- Developed proof-of-concept workflows for using AI to analyze user stories and identify potential acceptance criteria and testing gaps.
- Designed AI-assisted QA workflows that combine LLM-generated scenarios with existing automation frameworks.
- Built and maintained CI/CD pipelines in Azure DevOps, enabling automated validation across multiple environments.
- Implemented Playwright + Cucumber BDD + TypeScript + Allure automation architecture.
- Automated complex regression workflows that previously required 16–25 hours of manual testing, reducing execution to approximately 1.5 hours.
- Contributed to backend engineering by migrating legacy SOAP APIs to REST services using C#, Swagger, and JSON.
- Refactored authentication services to support OAuth2 and modern identity integration.
- Optimized SQL stored procedures and backend processes to improve application performance under load.
- Led automation and process improvements that accelerated release cycles and reduced manual QA dependency.

QA ENGINEER / AUTOMATION ENGINEER

Boscov’s | Jan 2024 – Oct 2024

- Designed and maintained UI and API automation frameworks supporting large-scale regression testing.
- Developed automated test suites integrated with CI pipelines.
- Improved regression coverage and reduced manual testing effort through automation.
- Collaborated with developers to investigate defects, analyze root causes, and improve application reliability.
- Designed automation strategies supporting Agile release cycles.
- Analyzed test and performance metrics to identify quality risks and production issues.
- Supported modernization of automation frameworks and development processes.

SOFTWARE ENGINEER

NantHealth | Jun 2022 – Oct 2024

- Developed and enhanced application functionality using C#, JavaScript, .NET, REST APIs, and SQL.
- Maintained and improved backend services supporting enterprise healthcare applications.
- Implemented application enhancements, bug fixes, and performance improvements across multiple modules.
- Worked with Git-based development workflows, branch management, merges, and release deployments.
- Improved integration and deployment processes across development teams.
- Collaborated with QA, development, product, and infrastructure teams to deliver reliable software.
- Applied software engineering practices to improve testability, maintainability, and application quality.

SELECTED ENGINEERING & AI PROJECTS

AI-Powered QA Integration Platform

- Designed workflows integrating AI-generated test scenarios with Playwright automation.
- Used AI to accelerate test creation while retaining human validation and automated execution.

- Focused on integrating AI into existing QA processes rather than replacing established automation infrastructure.

AI-Assisted SDLC Validation

- Developed concepts for using AI to analyze requirements and user stories for missing acceptance criteria, potential test scenarios, edge cases, regression impact, and quality risks.
- Created workflows for automatically reviewing recently created or modified stories and surfacing potential QA gaps.

AI Agent & MCP Integration

- Evaluated AI agents, MCP, GitHub Copilot, and modern coding assistants for enterprise QA and development workflows.
- Investigated ways for AI agents to interact with engineering tools and automate repetitive QA activities.
- Focused on practical AI adoption, governance, validation, and integration with existing engineering processes.

Enterprise Automation Platform

- Designed a scalable automation platform supporting UI and API testing across multiple applications and services.
- Implemented Playwright-based parallel execution through Azure DevOps.
- Reduced automation runtime by approximately 80%.

SOAP → REST API Modernization

- Migrated legacy SOAP services to modern REST APIs using C# and Swagger/OpenAPI.
- Improved maintainability, interoperability, and API usability.

Authentication Modernization

- Refactored legacy authentication services to support OAuth2.
- Improved security and compatibility with modern identity providers.

Database & Performance Optimization

- Refactored and optimized SQL stored procedures.
- Improved application responsiveness and stability under high-load scenarios.

TECHNOLOGY

AI / Developer Tools: GitHub Copilot, AI Coding Agents, MCP, LLM-based Test Generation, AI-assisted SDLC, AI QA Workflows
Languages: C#, Java, JavaScript, TypeScript, SQL
Automation: Playwright, Selenium, Cypress, WebdriverIO, Protractor, Cucumber, BDD, Allure
API / Backend: REST, SOAP, Swagger/OpenAPI, OAuth2, .NET
Performance: JMeter, Load Testing, Performance Analysis, SQL Optimization
DevOps: Azure DevOps, CI/CD, Git, Automated Deployment Pipelines

CERTIFICATIONS & EDUCATION

ASTQB / ISTQB Certified — 2016
Bachelor of Science, Economics — Belarusian State University