

Zach Howard

Automation Developer | Workflow, Test & AI-Assisted Automation

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SUMMARY

More than a decade of hands-on work across IT, custom development, QA and DevOps for multiple companies and studios (freelance since 2013).

SKILLS

Languages & Tools: Python, JavaScript, TypeScript, SQL, REST APIs, Git, GitHub

Automation: Playwright browser automation, API testing, test framework development, workflow automation

Scripting: Bash and PowerShell scripting

Infrastructure: Linux, Docker, Docker Compose, reverse proxies, networking, DNS, VPNs, monitoring with Grafana and Prometheus, Cloudflare, Tailscale, Authentik

Testing & Quality: Test automation, end-to-end, regression and integration testing, test planning and strategy, release validation, defect investigation

EXPERIENCE

Owner / IT Services

March 2026 – present

ZachTech · Oshawa, ON area

- Founded ZachTech, a local IT services business, and am building its client base.

QC Lead

March 2025 – March 2026

Eterio Realities · Victoria, BC

- Developed internal tooling using Claude Code to improve product knowledge access and debugging workflows.
- Built an automated Playwright test suite for the company's web application: 153 tests in 22 files (118 UI, 28 API, 7 visual) with 10 page objects, as of March 2026.
- Automated a test plan of about 200 cases covering roughly 90% of the web application and its APIs; the remainder was not practical to automate.
- Created repeatable testing workflows to improve consistency across releases.

Associate Quality Designer, Engineering Workflows

March 2024 – June 2024

Electronic Arts · Vancouver, BC

- Created and maintained QA test passes for Frostbite engine changes and validated new features and workflow changes.

QA Specialist, embedded at Electronic Arts

April 2020 – March 2024

Keywords Studios · Vancouver, BC

- Validated changes to internal build systems and developer workflows and created testing strategies for complex engineering systems.
- Embedded QA on the Frostbite Build Tools team, working directly with software engineers on internal developer tools and workflows used across AAA game projects.

IT Coordinator

September 2018 – April 2020

Mountain West Studios · Vancouver, BC

- Developed backend systems for automated video rendering and delivery, and automation for business workflows.
- Managed network planning, maintenance and recovery processes and supported internal technical operations.

Product Specialist & E-commerce Automation

January 2016 – August 2018

Saved By Technology (now Long & McQuade Pro) · Toronto, ON

- Automated product listing and order-processing workflows and managed online sales systems and integrations.
- Developed internal software tools and utilities for sales and operational workflows.
- Fully in charge of the company's Amazon sales channel.

Earlier roles

- Technical Analyst / Server Specialist at Aireus POS (2015): 24/7 emergency database contact for 400+ restaurants, QA testing and deployments.
- Freelance since 2013: server deployment, database migrations, and custom Max/MSP audio tools for musicians.

PROJECTS

- Design and run multi-agent AI development workflows with Claude Code and Codex, assigning models to tasks by strength and managing context to keep output reliable.
- Built an embeddable, zero-dependency TypeScript web component (Shadow DOM, Tailwind CSS) that gives real-time B2B automation quotes and validates lead capture. tools.zachtech.ca/projects/quote-calculator/
- Built and deployed tools.zachtech.ca: a Next.js and React portfolio with an MDX blog, a 13-theme engine and unit-tested client-side crypto and networking tools, on Cloudflare Pages with automatic deploys from GitHub. tools.zachtech.ca
- Designed and run a self-hosted homelab on two Unraid servers: about 40 Docker Compose-managed services, including Authentik SSO (with Postgres and Redis), Nginx Proxy Manager, Cloudflare tunnel and dynamic DNS, and Grafana and Prometheus monitoring.

EDUCATION

- Seneca College — Computer Programming & Analysis, 2011 – 2014