

Ryan Spice-Finnie

Senior Software Engineer

Frontend architecture, full-stack development and technical leadership

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Portfolio | LinkedIn | GitHub | Technical writing

London, Ontario | Available for Toronto hybrid and Canada-remote roles

Professional profile

Hands-on software engineer with more than a decade of **frontend-focused full-stack experience** across enterprise platforms, customer-facing products and independent consulting. I modernize legacy applications, establish **shared frontend architecture**, implement authentication and APIs, and deliver accessible interfaces using **JavaScript and TypeScript**, Angular, React and Svelte.

I work directly with architects, product owners, developers and clients, from requirements and architecture through implementation, testing and delivery. I have helped hire and lead developers, coordinated with distributed teams and supported the people maintaining the software. At Canopy Digital, I combine client delivery with practical AI harnesses and tool integration while remaining hands-on in code.

Selected career contributions

- Built reusable micro-frontend boilerplates at ADESA, adopted across teams.
- Led **Angular 19 prerelease server-side rendering** at AutoTrader; upgraded Pizza 73 from Angular 8 to 17.
- Helped hire and lead up to six developers at Indegene, delivering mobile, real-time and offline features.
- Owned the React administration replacement and delivered Shopify search at Ontario Cannabis Store.

Technical capabilities

Frontend architecture: JavaScript, TypeScript, Angular, React, Preact, Vue, Svelte/SvelteKit, native Web Components, HTML and CSS/SCSS; micro-frontends, SSR and prerendering.

Services and integration: Node.js, NestJS, PHP, SQL/MySQL, REST, GraphQL, OAuth/OpenID Connect; legacy .NET application environments, Java Spring maintenance, WebSockets, WebRTC, postMessage and offline synchronization.

Cloud and delivery: Hands-on Azure delivery since 2024: containers, Static Web Apps, CDN, Storage and OAuth/MSAL; earlier Microsoft/.NET environments; AWS/GCP project experience, Docker, Git, Jenkins, Webpack and Vite.

Quality and collaboration: AODA/WCAG implementation, Storybook, Vitest, Jest, Mocha, Chai, Jira, Agile delivery, technical documentation, hiring, mentoring and client collaboration.

Applied AI: Custom harnesses, Model Context Protocol (MCP), API tools, model routing and agent orchestration; independent review, shared execution budgets and deterministic verification.

Graphics and mobile: Canvas API, ImageData, Ionic and Cordova; recent Three.js, PixiJS 8 and rendering-performance tuning. C++ foundation through game-development education.

Professional experience

Canopy Digital

Aug 2024–Present

Principal Engineer

- Develop client websites and web applications with TypeScript, SvelteKit, PHP and API-backed services. Recent work includes TCM Acupuncture, Black Cedar Designs, Lancaster FBC and 519 Trough & Exterior.
- Deployed **three websites to Azure** during independent contracts since 2024, using container deployments and Azure Static Web Apps with CDN delivery and Azure Storage.
- Work with Azure OAuth/MSAL, Cloudflare Workers and payment integrations including **Stripe and Moneris**. Deployed a Shopify demonstration site at shop.canopydigital.ca.
- Design **Fugu Fusion**, a local orchestration protocol informed by OpenRouter Fusion and Sakana Fugu research, with **scoped delegation**, shared execution budgets, provider routing and spend controls.
- Build custom AI harnesses with **Model Context Protocol (MCP)** and API tool integrations, and develop the public Canopy Digital Fusion workspace. Use independent review and deterministic checks to assess changes.

AutoTrader.ca

2024 · 6/m

Full Stack Engineer

- Led homepage implementation with **server-side rendering** and prerendered components on Azure Static Web Apps, including work with an **Angular 19 prerelease**.
- Collaborated with architects and team leads on modernization while maintaining legacy Angular 8/9 components in a .NET 4 solution.

Pizza Pizza Limited

Nov–Dec 2023

Angular Deployment Specialist | Pizza 73

- Upgraded Pizza 73 from **Angular 8 to Angular 17**, updating build and serve workflows and Ivy rendering with Webpack, Express, Bootstrap and related dependencies.

Ontario Cannabis Store

Mar–Oct 2022

Senior Full Stack Engineer

- Owned a **React administration application** replacing a legacy Ruby frontend, using Storybook and design specifications to support consistent components and **AODA/WCAG 2.1** requirements.
- Delivered customer-facing search functionality to the live Shopify storefront.

Professional experience continued

Manulife

Jun 2020–Mar 2021

Senior Full Stack Engineer

- Developed customer login for the Travel business using ForgeRock/OpenID and Passport.js in an Adobe Experience Manager environment.
- Built accessible React and Storybook components and contributed to software design with an emphasis on AODA/WCAG requirements. Worked with NestJS and Swagger in the wider application environment.

Nobul

Aug–Nov 2019

Senior Full Stack Engineer

- Worked directly with the CTO on development plans and delivered autocomplete and client-tracking features using React and GraphQL, backed by Google Cloud Functions, with Jest for testing.

ADESA / Openlane

Feb 2018–Aug 2019

Senior UX Developer, then Senior Software Engineer

- Led **server-side rendering** for a micro-frontend solution and developed multiple frontend boilerplates. Owned a **modular Webpack frontend adopted by other teams**, presenting architecture and whiteboarding implementation approaches.
- Reverse-engineered the legacy Java OAuth authentication flow to build a frontend login system that worked with the existing backend.
- Worked across Vue, Preact, React, Angular and native Web Components in an AWS-hosted environment, using Mocha, Chai, Karma and Jenkins delivery workflows.

Indegene

Nov 2016–Feb 2018

Front-End Developer and Team Lead

- Helped hire and lead one to six developers, contributing to a multi-tenant Angular application delivered to Android and iOS through Ionic and Cordova.
- Implemented WebSockets, **WebRTC voice/video**, Google APIs, **offline synchronization** and tenant-content sharing.
- Worked with the backend team in a **Microsoft Azure and legacy .NET** environment, with Salesforce among the business systems and Jira for delivery tracking.

Goods and Services / G&S Branding

Jan–Jun 2016

Full Stack PHP Developer

- Built and maintained Drupal websites for Teva and Fairmont, including custom modules, Bootstrap/React components and French-language rollouts.
- Developed an interactive chair configurator for Nightingale Chairs using image layers and JSON data to represent chair options.

Earlier professional experience

FutureVault

Nov 2014–Oct 2015

Front-End Developer

- Built search/filtering, WYSIWYG editing and profile interfaces as the frontend evolved from WinJS to Bootstrap, React and Flux.
- Contributed to PHP/MySQL APIs and maintained Java Spring backend services, working across the interface and supporting services.

LM Staffing

Jan–Apr 2014

Full-Stack Developer

- Developed an analytics application integrating Elasticsearch on CentOS with PHP and SQL in a custom LAMP environment.

Earlier assignments: BMO accessibility work, a custom e-commerce solution for JTech and PHP/SQL development for contract clients.

Selected projects and independent development

Tracer Canada | Contact-tracing application | COVID-era 6/m build

Created a multi-tenant contact-tracing application using Svelte and PHP, with QR-code access and hosted restaurant menus. Implemented QR-code workflows for Sicilian Sidewalk Cafe, with brief engagements at Dundas and Sons, Kubbies Bar and Grill, and Bar Vivoli.

Tracer / Mark8t | Website and commerce platform

Developed a white-label website, hosting and e-commerce platform using Svelte/SvelteKit and PHP with Azure AD authentication. Combined implementation with client acquisition, account management, SEO and email marketing for small-business customers. This platform work followed the original contact-tracing focus.

Libraries and graphics | Independent software and game development

Authored reusable JavaScript and Svelte packages, including svelte-card-carousel, csv-to-javascript and ecmascript-toolkit, and SpiceJS, a Canvas-based graphics library for games. Recent Three.js and PixiJS 8 work explores rendering, interaction and performance tuning, building on Canvas API and ImageData experience.

AI tooling: Claude Code, Claudex, Codex and Hermes; DeepSeek harnesses, Kimi/GLM workflows, NVIDIA endpoints and Cloudflare AI.

Education and professional development

Video Game Design and Development, Yorkville University / RCC Institute of Technology, with a focus on C++ programming and project management. SAFe training and certification, 2019.