www.joshhowson.com
www.github.com/josh-howson

JOSH HOWSON

250-575-1893
josh.b.howson@gmail.com

EMPLOYMENT

Software Engineer   **Trader Interactive**   **2020-Present**

Lead engineer of frontend development initiatives across TI's numerous industry-leading vehicle classifieds websites.

- Project lead for rebuild of 11 vehicle classified websites in a legacy monorepo into a brand new Vue.js stack, resulting in 15 point increases to Core Web Vitals and profound reduction of technical debt.
- Reduced JS size by 40% across 11 websites upon being elected to performance taskforce, auditing large codebases for bottlenecks and evangelizing performance practices across the engineering department.
- Partnered with design department to introduce TIDE, the organization's inaugural Design System, standardizing Vue/Figma component libraries and custom CSS framework, significantly boosting design and UI team collaboration.
- Performed large UI overhaul of RVInsider and CycleInsider, resulting in a significant increase in user engagement.
- Implemented visual redesign of RVT.com with great accuracy, bringing delightful user experience to a dated site.
- Primary UI engineer working for over 2 years on Boatline.com, a new marine vehicles marketplace built with Next.js.
- Won company-wide hackathon, beating 39 teams to claim 25k cash prize by integrating AI to expedite ad placement.

Web Designer   **Dittos**   **2019-2020**

Kickstarted marketing agency's web services department.

- Consulted with prospective clients to establish project requirements.
- Wireframed websites in Figma, collaborating with clients to meet business and marketing goals.
- Developed deployed WordPress websites for numerous local businesses.
- Performed upgrades and enhancements to existing small business websites.

PROJECTS

Personal Website: www.joshhowson.com (for additional information & projects)

Snapshop - AI Visual Search (*ti-snapshop.vercel.app*)
- Developed AI-driven tool which allows users to snap a photo of any vehicle, and immediately be served matching results across many vehicle marketplaces, built during a 3-day hackathon with a designer and product manager.
- Integrated OpenAI's Vision API for image analysis.
- Prompt engineered for consistent and useful AI-generated JSON responses, and maximally confident matches.
- Created a beautiful custom card shuffle animation to delight the user while they wait for results.
- Used Canvas API to resize images on the client side to minimize OpenAI image processing fees.
- Utilized: Gen AI, OpenAI Vision API, Vue.js, Nuxt.js, CSS animation, Canvas API.

Fantano Sevens - Music Discovery App (*www.fantanosevens.com*)
- Realized my ideal web app which randomly selects a highly rated album from popular critic Anthony Fantano.
- Designed and prototyped the app in Figma, leveraging its component and design system features.
- Spun up RESTful API endpoints to fetch albums and provide a richer experience via metadata from Spotify's Web API.
- Invented cool new CSS-driven form control paradigm to detect when an element has flipped in 3D.
- Utilized: Vue.js, Nuxt.js, TypeScript, RESTful APIs, Vercel, Local storage, SCSS, Spotify API.

YT Thumbnail Previewer (*yt-thumbnail-preview.joshhowson.com*)
- Built a web tool to compare youtube thumbnails before videos go live.
- Cloned components based on the latest designs on youtube.com, providing useful thumbnail comparisons.
- Used the Youtube Data API to fetch live data for recently posted videos across various categories.
- Utilized: Vue.js, Vite, SCSS, TypeScript, Axios, Youtube Data API.

synth0 - Synthesizer Instrument (*joshhowson.com/synth0*)
- Leveraged the Web Audio API to create a custom subtractive synthesizer using native browser technologies.
- Used Canvas to display distortion module's signal transfer curve visualization.
- Researched, then implemented the MIDI protocol to add support for keyboards instruments.
- Utilized: Web Audio API, MIDI Protocol, HTML, JavaScript.

EDUCATION

Oakville, Ontario   **Sheridan College**   **2016-2019**

Diploma in Software Engineering

SKILLS

Technologies: *(proficient)*: CSS, JS, TS, React, Vue, Git *(familiar)*: PHP, Node.js, C, Java, SQL, Flutter, React Native.
Soft Skills: Critical Thinking, Attention to Detail, Leadership, Communication, Adaptability, Innovation.