Taylor Hogge

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SUMMARY

I am a passionate software engineer with extensive full-stack development experience on the Web. I have deep technical expertise with <u>WebAssembly runtimes</u> and am currently looking to transition into a related systems-level engineering role.

EDUCATION

University of Utah

Salt Lake City, UT

Bachelor of Science, Computer Science

Aug 2014 — May 2019

WORK EXPERIENCE

Full Stack Software Engineer

Feb 2024 — Present

Swell

Holladay, UT

- I am currently employed full-time at Swell. I work at all levels of the stack on their reputation management platform.
- Identified and remediated multiple high-impact security vulnerabilities in both their frontend React codebase and a legacy PHP backend.
- Authored technical proposals to align team on implementation strategies.
- Participated in rotating on-call schedule to respond to production outages.
- Technologies: React, Typescript, Node.js, Postgres, AWS, Kubernetes

Software Engineer

Aug 2019 — Mar 2023

Airin Inc

Park City, UT

- I joined Airin prerevenue as employee number three. I helped build the technology that got the company near \$10M in ARR
- Worked in a full-stack context primarily owned the "back of the front-end"
- Designed, and developed an interpreter for, a custom domain specific language that powered Airin's knowledge engine.
- Developed a Salesforce package that integrated directly with Airin's product. Involved the back-end implementation of a custom OAuth grant type as defined by Salesforce in RFC-7523
- Reported weekly to non-technical company executives summarizing completed work with business impact in plain english.
- Technologies: Typescript, Angular, Node.js, MySQL, Firebase, GCP, RxJS

Student Web Developer

Sep 2015 — May 2018

University of Utah

Salt Lake City, UT

- While I was pursuing my degree at the University of Utah, I interned on campus developing internal web apps for various university departments.
- Technologies: Java, MySQL, AngularJS, Typescript

PROJECTS

Semblance (github.com/irrio/semblance)

Aug 2024 — Present

- A WebAssembly VM that I wrote from scratch in C in order to learn about the WebAssembly Core Specification in depth.
- You can read about my experience implementing this project on my dev blog, plus a related discussion on Hacker News.
- Technologies: C, WebAssembly

OPEN SOURCE CONTRIBUTIONS

Wasmtime (github.com/bytecodealliance/wasmtime)

Jan 2025 — Present

- I'm currently working to get up to speed on Wasmtime internals in order to get involved with the <u>Bytecode Alliance</u>.
- In <u>PR 10057</u> I added support for the Pulley interpreter execution tier to the #[wasmtime_test] macro
- Technologies: Rust, WebAssembly

SKILLS

- Programming Languages: Typescript, HTML/CSS, Rust, C, SQL, Bash
- Technologies: Wasm, React, Node.js, Postgres, Git, UNIX, Docker, AWS, Kubernetes
- Interests: WebAssembly, Compilers, Language Runtimes, Entrepreneurship, Open Source Software, Technical Writing