Taylor Hogge

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SUMMARY

Full stack software engineer with 6+ years of experience building production web platforms at scale. Specialized in WebAssembly internals and systems programming. Actively seeking to leverage this expertise in a low-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 work at all levels of the stack on Swell's online reputation management platform for healthcare practices.
- Developed an event-driven AI pipeline to extract actionable insights from online review data using OpenAI APIs. This is now a core pillar of the product.
- Identified and remediated multiple high-impact security vulnerabilities including an XSS vulnerability in the front end React codebase, and a critical failure to validate a JWT signature in a core authentication endpoint of the legacy PHP codebase.
- Identified a performance bottleneck in a core authorization service used in almost every request. My mitigation resulted in a 600% speedup to the service.
- *Technologies*: React, Typescript, Node.js, Postgres, AWS, Kubernetes, OpenAI

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*: WebAssembly, C, Rust

SKILLS

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