Ashton Wiersdorf

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EDUCATION

University of Utah
PhD in Computer Science

Started Fall 2022
Salt Lake City, Utah

- Advisor: Ben Greenman
- Focus: Type and macro systems

Brigham Young University
B.S. in Computer Science, Math minor

2017–2022
Provo, Utah

- Cumulative GPA: 3.76/4.0

EMPLOYMENT

University of Utah
Research Assistant

Started Fall 2022
Salt Lake City, Utah

- Researched programming languages, emphasizing type and macro systems

Spiff Inc.
Software Engineer

May 2021–August 2022
Sandy, Utah

- Built, maintained, and extended an interpreter for a language tailored to processing financial calculations

TazWorks (now MeridianLink)
Software Engineer Intern

January 2020–April 2021
Draper, Utah

- Eliminated daily-manifesting bugs in the company's core Elixir application

20 Billion Neurons GmbH
Software Engineer Intern

September–December 2019
Berlin, Germany

- Dockerized AI application; built Travis CI script to automatically build and push images

Student Life Technology at BYU
Programmer

December 2016–April 2019
Provo, Utah

- Stabilized decades-old legacy systems; introduced version control and automated build pipelines

PROJECTS

See a full list of projects on my personal site and related sites such as Codeberg and GitHub.

FloatTracker   Project on GitHub
Automatically track floating-point exceptions in Julia

Ysue   Project on Codeberg
Text editor in Haskell featuring a rope data structure

Type inference with errors   Project on Codeberg
Type inference with precise error messages

μKanren   Project on Codeberg
Walkthrough of the μKanren embedded logic language

TOOLS AND TECHNOLOGIES

- **Languages (non-exhaustive)** Elixir, Julia, Racket, Haskell, Rust, C, Go, Python, Clojure, Swift
- **Web Development** Phoenix and Phoenix LiveView (Elixir), Mojolicious (Perl), Ring (Clojure)
- **Operating Systems** Linux, FreeBSD, macOS
- **Miscellaneous** Git, Docker, Travis CI

LANGUAGES

- **English** Native language
- **German** Fluent, CEFR level: C1–C2