Ashton Wiersdorf

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EDUCATION

University of Utah   2022–2027
PhD in Computer Science   *Salt Lake City, Utah*

- Dissertation topic: Type and macro systems

Brigham Young University   2017–2022
B.S. in Computer Science, Math minor   *Provo, Utah*

EMPLOYMENT

University of Utah   Started Fall 2022
Research Assistant   *Salt Lake City, Utah*

- Published at top-tier conferences on topics related to types and metaprogramming

Spiff Inc.   May 2021–August 2022
Software Engineer   *Sandy, Utah*

- Built, maintained, and extended an Elixir-based interpreter for a financial DSL
- Mentored junior software developers

TazWorks (now MeridianLink)   January 2020–April 2021
Software Engineer Intern   *Draper, Utah*

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

20 Billion Neurons GmbH   September–December 2019
Software Engineer Intern   *Berlin, Germany*

- Adapted a Golang project to be more robust under unstable network conditions
- Dockerized AI application; built Travis CI script to automatically build and push images

Student Life Technology at BYU   December 2016–April 2019
Programmer   *Provo, Utah*

- Full-stack developer on new and legacy web applications
- Introduced version control and automated build pipelines

PROJECTS

See a full list on my homepage and related sites such as Codeberg and GitHub.

Chorex   Project on GitHub ⬈
First-ever library for choreographic programming in Elixir

TrackedFloats.jl   Project on GitHub ⬈
Automatically track floating-point exceptions in Julia

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

μKanren   Project on Codeberg ⬈
Walkthrough of the μKanren embedded logic language

TOOLS AND TECHNOLOGIES

- **Languages (non-exhaustive)** Racket, Elixir, Julia, 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