

Ashton Wiersdorf

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EDUCATION

University of Utah

PhD, Computer Science

- Dissertation: *Event-Driven Choreographies*

2022–2027

Salt Lake City, UT

Brigham Young University

B.S., Computer Science

2016–2021

Provo, UT

PUBLICATIONS

JOURNAL PAPERS

Chorex: Embedded, Restartable Choreographies

Ashton Wiersdorf and Ben Greenman

Programming 10.3, 2026

CONFERENCE PAPERS

Type Tailoring

Ashton Wiersdorf, Stephen Chang, Matthias Felleisen, and Ben Greenman

ECOOP 2024

FlowFPX: Nimble Tools for Debugging Floating-Point Exceptions

Taylor Allred, Xinyi Li, Ashton Wiersdorf, Ben Greenman, and Ganesh Gopalakrishnan

JuliaCon 2023

TECHNICAL TALKS

Chorex: Embedded, Restartable Choreographies

<Programming> 2026

March 2026

Munich, Germany

Type Tailoring

RacketCon 2024, University of Washington

October 2024

Seattle, Washington

Type Tailoring

ECOOP 2024, TU-Wein

September 2024

Vienna, Austria

FlowFPX

JuliaCon 2023, MIT

July 2023

Boston, Massachusetts

EMPLOYMENT

Kuali

Contractor

- Developed data-migration pipeline in Elixir

May–August 2025

Lehi, Utah

Spiff

Software Engineer

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

May 2021–August 2022

Sandy, Utah

TazWorks (now MeridanLink)

Software Engineer Intern

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

January 2020–April 2021

Draper, Utah

20 Billion Neurons GmbH

Software Engineer Intern

- Made a large Golang project more robust under unstable network conditions
- Dockerized an AI application with a Travis CI script to build and push images

September–December 2019

Berlin, Germany

Student Life Technology at BYU

Programmer

- Full-stack development on new and legacy web applications
- Introduced and mentored coworkers to version control and automated CI pipelines

December 2016–April 2019

Provo, UT

SERVICE & TEACHING

Teaching Assistant

Winter 2026

- TA for CS 3100: Models of Computation

Mentor

Fall 2025

- Mentored a student weekly for BYU's open source class and advised on contributing to FOSS projects

PROJECTS

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

RESEARCH PROJECTS

Chorex [GitHub](#) 
Choreographic programming in Elixir

Dyn for Rhombus [GitHub](#) 
Add dynamic typing to Rhombus through type tailoring

FloatTracker [GitHub](#) 
Automatically track floating-point exceptions in Julia code

PERSONAL PROJECTS

Ysue [Codeberg](#) 
Simple text editor written in Haskell featuring a rope data structure

Type inference with errors [Codeberg](#) 
Type inference for a small lambda calculus with precise error messages

μKanren [Codeberg](#) 
Walkthrough of the μKanren embedded logic language

lambda-x86 [GitHub](#) 
My first compiler, which compiles a small Lisp to x86

SKILLS

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