

Ashton Wiersdorf

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EDUCATION

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|---|--|
| University of Utah PhD, Computer Science | 2022–2027 Salt Lake City, UT |
| • Dissertation: <i>Event-Driven Choreographies</i> | |
| Brigham Young University B.S., Computer Science | 2016–2021 Provo, UT |

PUBLICATIONS

JOURNAL PAPERS

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|--|------------------------|
| Chorex: Embedded, Restartable Choreographies Ashton Wiersdorf and Ben Greenman | Programming 10.3, 2026 |
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CONFERENCE PAPERS

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| 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

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| 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

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|---|---|
| Kuali Contractor | May–August 2025 Lehi, Utah |
| • Developed data-migration pipeline in Elixir | |
| Spiff Software Engineer | May 2021–August 2022 Sandy, Utah |
| • Built, maintained, and extended an Elixir-based interpreter for a financial DSL | |
| • Mentored junior software developers on a weekly basis | |
| TazWorks (now MeridanLink) 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 |
| • 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 | |
| Student Life Technology at BYU Programmer | December 2016–April 2019 Provo, UT |
| • Full-stack development on new and legacy web applications | |
| • Introduced and mentored coworkers to version control and automated CI pipelines | |

SERVICE & TEACHING

Teaching Assistant

- TA for CS 3100: Models of Computation

Winter 2026

Mentor

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

Fall 2025

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