

# ROBIN FISHER | IT / SHE

## Creative Software Engineer

**Status:** Freelance & volunteer

**Field:** Realtime Interactive, Data Visualization, Creative, and Geospatial Software Engineering

**Skills:** TypeScript, Rust, C++, Python, UI/UX, software architecture, Linux, containers

Longmont, CO

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[github.com/itsarobin](https://github.com/itsarobin)

A creative engineer passionate about artistic integrity and accessible and inclusive software design.

### Experience

**Senior Software Engineer** - Outside Analytics

Sep. 2020 - May 2023

- Technical lead for a prototype system that was instrumental in winning a \$500m government contract to visualize orbital objects and infrared imagery in real time
- Prototyped 3D geospatial visualizations in Unreal Engine, Unity, and pure Rust
- Authored a Wasm web worker framework for satellite propagation, including Rust bindings for [an open-source propagation crate](#) and a client's proprietary C++ propagation algorithm
- Implemented performance optimizations for 3D data visualizations, simulations, and web apps
- Designed architecture for:
  - An extensible dashboard that enables third parties to integrate their own views and visualizations
  - Micro services supporting multi-client concurrent data entry and manipulation
  - Accurate and performant rendering of up to 50,000 space objects in a web app
  - An Unreal application and blueprints for visualizing, inspecting, and entering geospatial data, including point clouds, real-time satellite imagery, historic and predicted satellite positions, and track lines

**Freelance Software Developer** - Freelance

Jan. 2013 - Present

**Software Engineer** - Inspirato

Jun. 2019 - March 2020

**Senior Web Developer** - Vermilion Design + Digital

May 2018 - March 2019

**Freelance Web Developer** - Neat Capital

Nov. 2017 - April 2018

**Senior Front-end Engineer** - Infield Digital

Aug. 2016 - Nov. 2017

**Enterprise Wordpress Architect** - Janus Capital

May - August 2016

**Front-End Developer** - Enova Financial

May 2015 - May 2016

**Front-End Developer** - The Creative Group

Jan. 2015 - Sep. 2015

### About me

**Career interests** - Social/collective impact, collaboration, creative endeavours

- Accessibility and inclusivity - working with communities to provide tools they need
- Collaboration with designers/artists, musicians, and other creatives to build unique experiences
- Creating progressive change focusing on underserved communities

**Personal interests** - Cooking, creativity, nature

- Self expression through music, art, and games
- Gardening, running with dogs, hiking, skating, and drone racing
- Baking, bread-making, stir-frying, BBQ, and more