

Interactive Things (Zürich): Interaction Engineer (August 2014 – Present)

- Writes bespoke web data visualizations, JS libraries, analysis tools, and dashboards
- Collaborates regularly with other developers, comfortable as main project developer or in supplemental role
- Works closely with designers and clients to deliver projects on-time and on-budget
- Builds back-end infrastructure, REST APIs, database I/O
- Builds responsive layouts and mobile-ready user interactions
- Applies functional programming concepts and techniques to front-end development
- Keeps up to date with the latest in web development, one of the fastest-changing fields in technology

Some of the projects I've worked on:

- [A visualization of demographics in the city of Zürich](#)
- [A map of changing political support over time in Switzerland](#)
- [A map of survey results from US small business owners](#)
- [An interactive tool for exploring a massive database of all US patents](#)
- [A data-art piece for Adobe](#)
- [A visualization of gun homicide data](#)

Technical proficiencies:

- Javascript ES5 and ES6 (very strong), Python 2 and 3, UNIX shell (strong), C++, Java, Rust, PHP, Coffeescript (familiar)
- Can work within an object-oriented or functional paradigm, and familiar with design patterns
- JS libs I've used in production: React, D3, Immutable.js, Ramda, Underscore, jQuery, Angular, Backbone, Easel
- Can draw things and make interactive visuals with SVG, Canvas 2D, WebGL, OpenGL, and Processing
- Tools I like: Git, NodeJS, Make, Webpack, GDAL, random Python scripts, PostgreSQL
- Delivered technical talks at SwissJS 2015 and Open Source Bridge 2014

Personal technical interests, the things I'm passionate about that I love working on in code

- OpenGL, real-time rendering, generative design, procedural generation, fractals and chaotic systems

Periscopic: Junior Developer and Data Scientist (October 2012 – July 2014)

- Front-end developer of data visualization software using Javascript and HTML5
- Provided initial data analysis and developed quick prototypes to aid conceptualization and design
- Developed a thorough knowledge of Javascript and the whole constellation of web technologies
- Learned programming on the job, self-directed with guidance from coworker mentors
- Transitioned within the company from a data and analysis-oriented role to a full-time developer role

Mentor Graphics: Analyst, Sales Operations (May 2012 – September 2012)

- Produced detailed and thorough analysis of sales data for a global software company
- Work presented to company executives and president
- Recommendations changed revenue planning for multi-million dollar share of billion-dollar company

Reed College Economics Department: Research Assistant for Prof. Denise Hare (May – August 2011)

- Collaborated on a peer-reviewed research paper which was presented at an academic conference
- Responsible for statistical tests and modeling

Reed College Economics Department: Teaching Assistant and Tutor (2011)

- I'm a pretty good teacher. After all, the best way to learn something is to teach it!

Reed College: Bachelor of Arts, Economics, 2012

- Thesis Title: "Fear and Fortune in the Political Economy of Civil War: Evidence from Ghana and Sierra Leone"

Southwest High School: International Baccalaureate Diploma

Languages

- English (native), German (B2), French (B1)