

WEBSITE jeremyfischer.net

EMPLOYMENT

Software Engineer, Intern **Autodesk** **Summer 2017 - San Francisco**

Form Builder - Manufacturing Data Service. JavaScript, AngularJS, HTML, JSON Schema

- Created a property panel that allows form creators to edit a form's field type, force response, help contents, validation options, and form field display logic (hide/show elements based off conditions).
- Reduced display logic's repetitive precompute time from $O(n^3)$, to once on page load by creating a required elements tracker.
- Modified form schema to reduce $O(n^3)$ form element finding by appending unique IDs to elements.
- Implemented validation for entire Form Builder application, enforcing correct user inputs.

Software Engineer, Intern **Autodesk** **Summer 2016 - Portland**

Fusion 360 Simulation Assistant. Python

- Created a prototype that automatically conducts Finite Element Analysis (FEA) simulations on parts and assemblies in Autodesk's Fusion 360 CAD software.
- Boosts design efficiency by reducing the simulation analyst bottleneck.
- Slashes labor costs by reducing product life cycle time.
- Lead project meetings with colleagues from around the globe.

Teaching Assistant **Oregon State University** **Fall 2015 – Spring 2016**

- Courses: Foundations of Computer Science I, II & III. C++, C, Python
- Taught labs and recitations.
- Held one on one demo hours with students where I gave them feedback on their coding assignments.

EDUCATION

Corvallis, OR **Oregon State University** **Fall 2014 – December 2018**

- B.S. in Computer Science, Major GPA: 3.77.
- Undergraduate Coursework: Algorithms; Data Structures, Cloud Development, Information Visualisation, Operating Systems; Networking; Databases, Comp. Architecture, Entrepreneurship, Public Speaking, Physics.

TECHNICAL EXPERIENCE

Projects

- **Kora (2018):** Currently creating a voice interface to Autodesk's Fusion 360 design software. This will allow users to execute voice commands such as "rotate design 90 degrees left." Python, MongoDB
- **Linux Kernel's SLOB Best-Fit (2017):** Implemented a best-fit algorithm for the Linux kernel's SLOB, and compared its memory fragmentation with the default first-fit algorithm. C
- **OTP Encryption (2017):** Implemented One Time Pad encryption where the text was sent and received through network calls. C
- **Food Delivery (2016):** Built a website that lists all open Corvallis restaurants that deliver and their information. Signed in users can rate dishes, upload photos, and leave reviews for restaurants. HTML, CSS, JavaScript, PHP, SQL, MySQL

ADDITIONAL EXPERIENCE AND AWARDS

- **College of Engineering Leadership Academy:** Currently attend seminars regarding effective leadership, inclusivity, and career advancement lead by successful industry leaders of Fortune 500 companies.
- **OSU ACM-ICPC Practice Competition:** Earned first place in a team of three at OSU's ACM-ICPC practice coding competition out of 15 teams. C++, Python
- **University of Oregon Hackathon:** Developed a marketable 2D top down shooter game with a team of five in a three-day hackathon competition. C++

Languages and Technologies

- **Proficient in:** C/C++; HTML **Competent in:** JavaScript; Python **Familiar in:** Java; PHP; SQL
- AngularJS; JSON Schema; MySQL; Git; JUnit