

WEBSITE jeremyfischer.net

EMPLOYMENT

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

Form Builder - Manufacturing Data Service

- Created a property panel that allows form creators to edit a form field's 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 and preventing corrupt schema.

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

Fusion 360 Simulation Assistant

- 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
- 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, GPA: 3.84.
- Undergraduate Coursework: Algorithms; Data Structures, Operating Systems; Networking; Databases, Comp. Architecture, Entrepreneurship, Public Speaking, Physics, Calculus.

TECHNICAL EXPERIENCE

Projects

- **Apache URL Validator Testing Suite (2017):** Tested the Apache URL validator application and found discrete bugs that the professor introduced. Java, JUnit, Maven, EvoSuite.
- **OTP Encryption (2017):** Implemented One Time Pad encryption where the text was sent and received through network calls. C
- **Bash Shell (2017):** Created a small bash shell that handles multiple processes at once. C
- **Food Delivery (2016):** Built a website that lists all open Corvallis restaurants and their information if they deliver. Signed in users can rate dishes, upload photos, and leave reviews for restaurants. HTML, CSS, JavaScript, PHP, SQL, MySQL
- **Roomba Simulation (2015):** Consumed text files representing rooms and found the shortest cleaning path. C++

ADDITIONAL EXPERIENCE AND AWARDS

- **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
- **College of Engineering Leadership Academy:** Attend seminars regarding effective leadership, inclusivity, and career advancement lead by successful industry leaders of Fortune 500 companies.
- **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 **Familiar in:** JavaScript; Python; Java **Prior Experience in:** PHP; SQL
- AngularJS; JSON Schema; JUnit; MySQL; Git