
EXPERIENCE

- **Pluralsight** Salt Lake City, UT
Software Engineer *Oct 2019 - Present*
 - **React App Development:** Added new functionality for video course authors to edit their profile, view payment and viewership analytics data, and browse and apply to opportunities for new courses.
 - **Node.js Server Development:** Added email communications to give authors feedback when they apply to teach a course and are accepted or rejected. Integrated our team's services within Pluralsight's larger system using RabbitMQ, external APIs, and replicated databases.
- **Polyhedron Online** Salt Lake City, UT
Creator & Software Engineer *Sept 2019 - Present*
 - **Virtual Tabletop:** Developed a virtual gaming tabletop for users to play RPGs and miniatures games over a websocket. The VTT can build 3d maps from layers of 2d images using a novel terrain building system, and is rendered using PixiJS in a React app.
 - **Infrastructure:** Built a microservice application from scratch, using Node.js, MongoDB, and Kubernetes, hosted on Amazon EKS.
- **Recursion Pharmaceuticals** Salt Lake City, UT
Software Engineer *Feb 2017 - Sep 2019*
 - **Experiment Design Tools:** Extended Go API and developed an accompanying React app for data scientists and biologists to design cell culture plate layouts for experiments to identify disease phenotypes and treatment candidates using microscopy.
 - **Image QC & Feature Labeling:** Developed ClojureScript/Reframe application with a Flask backend to review images from large microscopy experiments, perform live custom compositing of multi-channel images, overlay cell segmentations, and apply labels to images and image regions for use in training classifiers.
 - **Infrastructure & Support Tools:** Created various microservices and apps in Go and Flask to support our image processing pipeline. Created various Splunk dashboards with custom search commands to track experiment status. Configured Travis to automatically deploy apps to Kubernetes on merge to master.
- **UCLA Cardiac Proteomics and Signalling Laboratory** Los Angeles, CA
Programmer Analyst *Jan 2013 - Jan 2017*
 - **ProTurn:** Developed a command line and GUI application in Java to perform protein turnover analysis on heavy water labeled mass spectroscopy data, and display data in graphical and tabular formats. Built with JavaFX and Apache Commons Math. Coauthored four related publications, viewable at orcid.org/0000-0002-9930-2169
 - **Batch Processing Manager:** Set up and configured a local cluster to run protein library search batch processing (OpenPBS) jobs. Developed a GUI application in Java to create and monitor jobs.
- **US Navy** Apra Harbor, Guam
Submarine Reactor Operator *Jan 2006 - July 2011*
 - **Watchstanding:** Stood over 5,000 hours of watch as Shutdown Reactor Operator, Reactor Operator, Reactor Technician and Electrical Operator while S6G reactor plant was critical and shutdown. Participated in numerous sophisticated drills and casualty scenarios.
 - **Maintenance:** Conducted repairs and preventative maintenance on reactor instrumentation and control systems.

EDUCATION

- **University of California, Los Angeles** Los Angeles, CA
Bachelor of Science in Physics *2015*

HACKATHONS

- **7DRL Game Jam 2020:** JavaScript Texas Hold'em roguelike game and Wild West town simulator. Created in 7 days, placing 33 out of 209.
- **7DRL Game Jam 2018:** JavaScript roguelike game in which you fly a spaceship and struggle against the conservation of momentum. Created in 7 days, placing 26 out of 146.
- **2015 Big Data to Knowledge Hackathon:** Won \$500 first prize for Android cooperative running app that used GPS to support friends running in sync remotely.