(608) 554-0866 joer14@gmail.com joerowley.net linkedin.com/in/joerowley

#### Education

BS, Computer Engineering, BA, Computer Science University of California, Santa Cruz Fall 2015

# Software Experience

Integrated Healthcare Association

- Full Stack Web Engineer / Generalist

- February 2016 Present
- Built data reporting portal for monitoring physician level progress across multiple large health organizations.
  - Django, React/Redux/Highcharts, Postgres on RDS, Ansible on AWS EC2
  - Data ingestion and report generation using Pandas
- Cost Atlas: Worked with another developer to create tool for visualizing health quality and cost disparities across California.
  - Flask, React/Alt.js/Highcharts, Pandas, Numpy, Fabric

University of California, Santa Cruz

- Undergraduate Thesis

March 2015 – December 2015

- Created a web application that predicts the ideal heparin dosage using existing models.
- Conducted a study to determine the feasibility of using a statistical drug dosing tool in a mock clinical setting.
  - Angular JS, D3.js, Python, Flask, Postgres, SQLAlchemy, Scikit-learn.

Sana, MIT

- Developer, Educator

February 2014 – October 2014

- Developed the Sana Protocol Builder, a web application that allows clinicians to create medical algorithms that run on community health workers' smartphones in rural and low resource environments.
- Lectured with a group from MIT at Vellore institute of Technology in India about the Sana medical platform, and web application engineering to undergraduates.

## Hardware Experience

Bellus 3D — Los Gatos, CA

- Consultant

August 2015 – January 2016

- Developed hardware prototypes for an experimental camera.
- Wrote Python for Raspberry Pi and C for microprocessors.

University of California, Santa Cruz, CA

- Undergraduate Research Intern

July 2014 – March 2015

- Designed a prototype of an experimental camera flash with individually controlled high power LEDs.
- Required PCB design and layout using Cadence Allegro.

## **Side-Projects**

Gadcalc

- Developed a gadolinium contrast agent dosage calculator for technicians and medical doctors.
- Built in Angular.js and Bootstrap.

## Awards

Ira and Kate Pohl Computers and Society Award

 $\mathrm{May}\ 2015$ 

• Ira and Kate Pohl scholarship is to recognize and support outstanding undergraduate students who are committed to using computer science for social good.

Dean's Honors for Fall 2011, Fall 2013, Spring 2014, Winter 2015, Spring 2015