

EDUCATION

- **Utah State University** Logan, UT
Computational Mathematics (BS); GPA: 3.88 *Aug. 2015 – Dec 2018*
- **Cuesta College** San Luis Obispo, CA
Three semesters to transfer; GPA: 3.95 *Jan. 2014 – May. 2015*

EXPERIENCE

- **Atomic Jolt** Logan, UT
Software Engineer *June 2018 - Present*
 - **Learnosity Connector:** Contributed to the Learnosity Connector project which enables teachers to author course content in Canvas via the popular Learnosity service.
 - **Socialize:** Developed new elements of Atomic Jolt's Socialize platform for polls and discussions between students.
 - **Waymaker:** Collaborated with Lumen Learning on the Waymaker project and developed educational workflow software
 - **Atomic Insight:** Led the Insight project to replace Canvas Analytics with a novel LTI stack written in Go+React to deliver customized metrics into Canvas Courses
- **USU Power Electronics Laboratory** Logan, UT
Software Engineer / Research Assistant *Jan 2016 - Jun 2018*
 - **Square One - Altium Library Management System:** Created a system using Node+Express for mass-submitting tickets for new parts to be added to our in-house Altium Database and verified by librarians.
 - **CAN Data Graphing Utility:** Created a application for generating and sharing graphs of terabytes of data accrued in the AMPED battery life extension project.
 - **Graphic Design:** Designed all the banners and window decals around our facilities in Logan, UT. Utilized a unified color palette for all the facets of our organization.
- **USU GASLab** Logan, UT
Volunteer Software Engineer *Apr 2017 - Dec 2018*
 - **Cubium Software Project:** A volunteer of the Get-Away-Special small-satellite program at Utah State University. Developed open source subscription-based plug and play software for small satellite application as well as new hardware that will empower individuals to deploy experiments on a budget.
- **West Coast Astronomical Society** Santa Margarita, CA
Head of Mechatronics *Jun 2014 - Jan 2015*
 - **Telescope Automation:** Took charge of automating the hardware of a Meade 10" telescope to more accurately detect the positions of binary star systems.
- **Cuesta College** San Luis Obispo, CA
Tutor *Aug. 2014 – May. 2015*
 - **Math / Physics Tutor:** Tutored all levels of mathematics. Teachers frequently sent students to me so that I could explain new concepts to them.

ACHIEVEMENTS

- **USU - Magna Cum Laude:** Graduated Magna Cum Laude in the Computational Mathematics program at USU
- **USU Hackathon (2016-2018):** Took first place three years in a row at the Utah State University intercollegiate hackathon
- **Cuesta College FBSA (2015):** Awarded the Frank Brown Science Award for outstanding academic achievement.

PROJECTS

- **8 Bit Spaghetti:** Designed and built 8-bit processor using TTL. Helped many students around the world build versions of the design.
- **Dream Cloak LED Display:** Designed and built a 15x30 24-bit wearable RGB LED display and a web app to control it wirelessly, all in five days.
- **Automata Research:** Developed novel approach to classifying all Life-Like Cellular Automata by a similarity metric.
- **Health Research:** Designed and built personal health analysis applications (ECG/Apple Health) for insight and knowledge into their own health.

PROGRAMMING SKILLS

- **Languages:** TypeScript, JS (es10), CSS3, Python, C, C++, Ruby, Julia, Go, Swift, SQL, Haskell, LISP, Bash, LaTeX
- **Technologies:** React, GraphQL, Node.js, Rails, Express, Tensorflow, Numpy, Postgresql, WebSocket
- **Operating Systems:** MacOS, Arch, Ubuntu/Debian, CentOS, Windows