

## EDUCATION

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- **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

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- **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.
  - **Atomic Insight:** Led a project using Go and React that uses LTI advantage to deliver 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 an HTML5 asynchronous web-app 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 - Present
  - **Cubium Software Project:** A volunteer of the Get-Away-Special small-satellite program at Utah State University. Develops 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

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- **USU - Magna Cum Laude:** Graduated Magna Cum Laude in the Computational Mathematics program at USU
- **USU Hackathon (2018):** Took first place for the third time in a row at the Utah State University intercollegiate hackathon for a Neural Network that can read D'ni numbers.
- **Cuesta College FBSA (2015):** Awarded the Frank Brown Science Award for outstanding academic achievement.

## PROJECTS

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- **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

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