# Chelsea Stauber

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## SUMMARY OF QUALIFICATIONS

Developer with a sharp attention to detail and a background in geophysical research. A strong sense of aesthetics motivates me to solve complex problems in an elegant, scalable way. Interested in design and creating an excellent user experience. Dedicated to empathetic mentorship and improving soft skills. Extremely curious and adept at learning new concepts. Strong written and verbal communication of physical, technical, and mathematical ideas.

## LANGUAGES AND TOOLS

- **Skills at a Glance**
- Frontend Web Development, Object Oriented Design, MVC Design, Algorithms, Research, Responsive Design, Website Performance, Browser Rendering Optimization, JavaScript Testing
- **Programming/Scripting Languages**
- JavaScript, Python, jQuery, CSS, HTML, Ajax, Processing.js
- **Environment and Workflow**
- Linux, Mac, Subversion, Git, Netbeans, Flask, Atom

## RELEVANT PERSONAL PROJECTS

- Built a single page app to search for articles related to a street or city of the user's choice. Used jQuery, promises, and AJAX to interact with the New York Times, Google StreetView, and Wikipedia APIs.
- Replicated a design mockup in CSS and HTML to create a responsive portfolio showcasing my work. Used the bootstrap framework to organize the page layout and present modal windows.
- Built an interactive resume page which reads content from a JSON file. Page displays responsively across all standard viewports.
- Created a 2D Mario-style platformer game which can be played in the browser. The game was built with the the Quintus HTML5 framework.
- Used OOP concepts to create a game similar to the classic 'Frogger' but with a twist.
- Utilize mathematics, JavaScript, and Processing.js to create simulations inspired from the natural world.
- Organize and lead a weekly meetup dedicated to solving computationally challenging math problems using efficient algorithms.

## PROFESSIONAL EXPERIENCE

### Codecademy, https://www.codecademy.com

New York City, New York — 2016-present

- Provide technical advice and code review for online learners.
  - Topics of support include Python, JavaScript, Git, HTML, CSS, Angular, and the Command Line .
- Perform support engineering tasks.
- Learner mentorship and career guidance.

### Two Wires Lab, http://www.podpi.com/

Sacramento, California — 2016

- Design nodebotics projects and content to facilitate STEM education.
- Promote product through customer outreach.

### XtremeGeo, xtgeo.com

Boulder, Colorado — 2014-2015

- **Java Implementations**
  - Simulate seismic waves using numerical methods to map subsurface geological features.
  - Balance memory and runtime efficiency for computationally intensive simulations.
- **Topics of Research**

- Reverse Time Migration, Microseismic Event Location, Anisotropy, Wave Equation Modeling, Full Waveform Inversion, Pseudo-acoustic Wavefield Propagation, Generalized Linear Inversion, Finite Difference Methods, Descent Methods.

**Domestic and International Training**

- Train geoscientists to use company software to perform refraction statics on seismic data.

**Managerial Tasks**

- Schedule weekly meetings to facilitate technical communication and meet project deadlines.
- Organized projects and encouraged focused goal setting.

### Modular Robotics Incorportated, modrobotics.com

Boulder, Colorado — 2014

- Electronic and mechanical assembly.
- Soldering circuit boards and bootloading embedded systems.
- Troubleshooting of robotic electronics and hardware.
- Testing printed circuit boards.

### J.B Saunders, Jbsaundersco.com

Boulder, Colorado — 2013-2014

- Place orders and make purchasing decisions for all Sparkfun inventory.
- Help customers find the right parts for their projects.
- Explain basic electronics to new hobbyists.
- Assemble electronic and robotic displays.
- Facilitate communications with event coordinators.

## EDUCATION

### University of Colorado, Boulder

B.A. Mathematics, Emphasis on Physics — 2010 - 2013

- Computer Science Coursework: C++, the computational world
- Math Coursework: real analysis, differential geometry, linear algebra,
- differential equations, statistics, mathematical physics, mathematics for teachers
- Physics Coursework: modern physics, electromagnetism, quantum mechanics
- Topics of study from educational platforms like Udacity and Coursera include: python, web development, complex analysis, linear circuits, nanotechnology, audio engineering, fundamentals of electrical engineering, Object-Oriented JavaScript, HTML5 Canvas, Website Performance Optimization, Browser Rendering Optimization, Intro to Ajax, Intro to jQuery, JavaScript Design Patterns, JavaScript Testing, How to Use Git and GitHub
- Collaborated with the Crafts Technology Lab to create electronic origami pieces.

## ADDITIONAL EXPERIENCE

- Familiar with basic physical computing concepts.
- Practical and conceptual knowledge of basic electronics.
- Proficient at researching and implementing technical information.
- Experience patiently teaching technical concepts to clients.

## PERSONAL INTERESTS

- Dedicated guitarist

- Skilled rock climber
- STEM enthusiast
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## REFERENCES

**Available upon request.**