

## Education

2010 – 2014 **Pomona College**  
PHYSICS & ASTRONOMY  
*Bachelor of Arts (Major GPA: 3.5)*

## Work Experience

**hackNY Fellow / Software Intern** New York, NY  
Datadog, Inc. Summer 2013

- Worked with high throughput (400k payloads/sec) data processing systems and browser-side visualization with Python and JavaScript
- Chosen for the hackNY Fellows program to work in New York's "Silicon Alley" with 36 other hand-selected college and graduate students
- Turned around fixes for customer-reported bugs swiftly, solving security and performance issues

**Adaptive Optics Researcher** Claremont, CA  
KAPAO Collaboration Aug. 2013 – May 2014

- Developed Python data analysis tools for an adaptive optics system that corrects telescope images taken through turbulent atmospheres
- Characterized performance of the system on-sky
- Presented research at the American Physical Society and American Astronomical Society

**Research Assistant to Dr. Jacoby** Claremont, CA  
Carnegie Observatories May 2012 – Jan. 2013

- Automated processing of data from the Kepler space telescope to find periodic components
- Detected faint signals in noisy data sets to understand the evolution of stars
- Presented research at the American Astronomical Society

**Teaching & Lab Assistant** Claremont, CA  
Physics Dept., Pomona College 2012 – 2014

- Helped students with concepts and equipment
- Troubleshoot students' circuits and helped students understand problems (Electronics with Lab)
- Instructed students in using UNIX/Linux command-line tools, supervised telescope observations, assisted with data analysis (Observational Astronomy)

## (More) Work Experience

**Lead Student Developer** Claremont, CA  
ASPC 2011 – 2014

- Built a course-shopping system used by 4000+ students at five colleges
- Led and trained a team of student developers to maintain and improve ASPC web services
- Created a student-to-student textbook sales website (1,200 students served!)
- Secured the student store by improving handling of payment card information for online orders
- Created a shared hosting provisioning system on an ASPC server for student organizations
- Developed a visual identity for ASPC, as well as a comprehensive frontend redesign

**Software Development Contractor** Atlanta, GA  
Sandy Springs Pediatrics 2008 – 2009

- Developed an online system to facilitate confidential communication between nurses and patients' parents.
- Maintained the system through 6 years of continuous operation and almost 20,000 messages exchanged.

## Awards & Honors

**Frank Parkhurst Brackett, Jr. and Davida Wark Brackett Prize in Astronomy** (*May 2014*)  
**Pomona College Senior Service Award** (*May 2014*)  
**Pomona College Scholar** (*Fall 2013*)

## Skills

**Languages:** English, Spanish  
**Programming Languages:** Python, SQL, C, C++, Java, Processing  
**Technologies:** Django, NumPy, d3, git, nginx, MySQL, PostgreSQL, Gunicorn  
**Consumer Software:** Mac OS X, Windows, Linux, Adobe Photoshop, Adobe Illustrator, L<sup>A</sup>T<sub>E</sub>X, Microsoft Office suite