

# Katherine WYMAN

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GitHub: [github.com/katy6514](https://github.com/katy6514)

Portfolio: [katherinewyman.com](http://katherinewyman.com)

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## >LANGUAGES AND TECHNOLOGIES

- **Proficient:** Python, PHP, Laravel, SQL, MySQL, Apache, Linux, OOP, HTML5, CSS3, WordPress, LaTeX, Git
- **Exposure:** JavaScript, jQuery, Perl, D3.js, IDL

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## >PROFESSIONAL EXPERIENCE

### Women's Coding Collective | Web Developer + Instructor | Cambridge, MA

Sep 2015 - May 2017

- Redesigned WCC blog and newsletter in HTML5 and CSS3 responsively, increasing new students by 20%.
- Provided online support for over 50 students in all classes: PHP, JavaScript & jQuery, Wordpress Basics, CSS Basics, CSS Layouts and Positioning; first response within 2 hours of ticket submission.
- Tested and edited course materials and pages for all WCC classes with HTML5 and CSS3, decreasing technical debt by more than 20%.

### Harvard-Smithsonian Center for Astrophysics | Web Developer | Cambridge, MA

Sep 2011 - Dec 2015

- Developed sortable/searchable list of all large projects observed with the Chandra Space Telescope with Python, PHP, jQuery, HTML and CSS, improving UX and optimizing speed of data mining by more than 95%.
- Enhanced speed of aggregation, processing, and distribution time of telescope research proposals by over 14X through automating yearly data collection on all observations using Python and MySQL.
- Updated and automated online registration system for Chandra conferences and meetings utilizing JavaScript, JQuery and Python, saving department over \$11,000 annually in conference organization time.
- Improved user experience from visitors with any device by redesigning web pages using JavaScript, jQuery, HTML5, CSS3, and responsive design techniques, increasing accessibility by 60%.
- Streamlined end-of-review deliberations for Chandra director's office by over 50% through developing visualization of telescope time allocation decisions with JavaScript and D3.js.

### Harvard University | Teaching Assistant | Cambridge, MA

Sep 2014 - May 2017

- Provided one-on-one troubleshooting and mentorship for 20-30 students/semester on server configuration, version control with Git, MVC frameworks, databases and CRUD operations, RESTful routing etc.

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## >EDUCATION

Master of Arts in Astronomy, Wesleyan University

May 2011

Bachelor of Arts in Physics, Sonoma State University

May 2009

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## >PROJECT WORK

### Chandra Bubbles | Software Engineer | [live](#) | [code](#)

Jun 2015

*Data visualization of first 15 years of observations made with Chandra Space Telescope.*

- Assigned visual attributes to 750+ telescope observations recorded over 15 years using JavaScript and D3.js for radius of bubble for time, color for science area, etc.
- Inserted metadata into popup bubble for extra details such as science abstract, formatted with HTML and CSS.

### Developer's Best Friend | Software Engineer | [live](#) | [code](#)

Dec 2016

*System for generating fake users and other data for web developers to test their applications.*

- Developed data generator with Laravel for specific fake user attributes, memorable passwords, and .htaccess credentials; responsively designed in PHP, HTML5, and CSS3, reducing development time on projects by 20%.

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## >AWARDS

Chambliss Award for Excellence in Graduate Research, American Astronomical Society

Jun 2012

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## >PUBLICATIONS

[Probing Our Heliospheric History](#), *Astrophysical Journal*

Jul 2013

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## >ACHIEVEMENTS

Pacific Crest Trail Hike, *Hiked ~2000 miles of the PCT for 6 months from Mexico to Canada*

May - Oct 2017