

# ZOË AMES

Developer | Web Designer | Astrophysicist

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## Projects

### Star Trek: Journey to Starbase Andromeda

[startrek.zoeames.com](http://startrek.zoeames.com)

A choose-your-own-adventure game based on characters from the Star Trek franchise backed with real physics calculations.

*Skills used:* Javascript, MongoDB, Express, Angular, Node, Bootstrap

### Capstone 2

[capstone2.zoeames.com](http://capstone2.zoeames.com)

Allows teachers to bring technology into their classrooms by providing a platform where teachers can ask questions and students can vote with their smartphones.

*Skills used:* Javascript, PostgreSQL, Hapi, Angular, Node, Foundation

## Education

### Nashville Software School

*Graduation:* January 2015

- Six month intensive bootcamp focusing on programming in Javascript
- Main technologies: MEAN Stack but also experience with SQL databases
- Experience with individual projects, pair programming, and group work
- Focus on testing and TDD with Mocha, Chai, and Lab
- Emphasis on mobile development and desktop apps with mobile components

### Master of Science in Physics

*San Francisco State University*

*Graduation:* May 2014

*Thesis Title:* "Searching for the Lowest Mass Products of Star-Formation in IC 348"

*Coursework in:* Interactive Data Language, Mathematica, UNIX

### Bachelor of Arts

*Smith College*

*Graduation:* May 2009

*Double Major:* Astronomy and Physics

*Coursework:* Python, Mathematica, UNIX, Interactive Data Language, Matlab

## Related Experience

### Research Experience

*Institutions:* San Francisco State University (October 2010 to May 2014), SETI Institute (Summer 2012), McDonald Observatory (Summer 2008), Lowell Observatory (Summer 2007), Smith College (September 2005 - May 2009)

*Experiences gained:*

- Over 9 years experience with UNIX and LINUX operating systems
- Over 8 years experience using and writing Fortran based programs (IDL and IRAF)
- Over 9 years of physics based problem solving
- Over 8 years experience working with large sets of data. Including both data reduction and data analysis

### StudyPoint/PrepNow Tutor

*October 2010 - present*

*Responsibilities:* Tutor students at their houses and online in SAT, ACT, PSAT, SSAT, Physics SAT II, or academic tutoring. Nominated three times for Most Valuable Tutor award.

### Graduate Teaching Associate

*August 2010 - May 2014*

*Location:* San Francisco State University

*Responsibilities:* Taught two sections of ASTR116: Introductory Astronomy or PHYS 102: Introductory Physics for Non-Science Majors per semester.

### Undergraduate Teaching Assistant

*August 2006 - May 2009*

*Location:* Smith College Astronomy Department

*Responsibilities:* Assisted teaching introductory astronomy courses.

## Contact Details

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## Skills

### LANGUAGES:

- Javascript
- Python
- Fortran
- Mathematica
- Matlab

### TESTING:

- Gulp
- Grunt
- Mocha
- Chai
- TravisCI
- Coveralls
- Lab

### DATABASE:

- MongoDB
- PostgreSQL
- Mongoose
- RoboMongo

### USER EXPERIENCE:

- CSS3
- HTML5
- Jade
- Less
- Sass
- jQuery
- Bootstrap
- Foundation

### MOBILE DEVELOPMENT:

- Cordova
- PhoneGap
- Ionic
- iOS and Android
- Xcode

### PROFICIENT IN:

- Adobe Photoshop
- Mac, PC, and Linux OS
- Microsoft Office
- IDL
- IRAF
- LaTex