ZOË AMES

Developer | Web Designer | Astrophysicist

Projects

Star Trek: Journey to Starbase Andromeda

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

CourseControl

coursecontrol.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

406 Lovell Avenue
Nashville, TN 37209
(925) 324-2952

zoeames@gmail.com

www.zoeames.com
github.com/zoeames
linkedin.com/in/zoeames

Skills

LANGUAGES:
- Javascript
- Python
- Fortran
- Mathematica
- Matlab

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

DATABSE:
- 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