Justin Neill Blythe

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Summary

Specific experience in organizing, problem solving, and communicating status, progress and timely completion of assigned projects; demonstrated proficiency in prioritizing tasks to meet deadlines; adapts readily to new challenges; grasps and applies new procedures quickly; highly-motivated, detail-oriented team player.

Objective

To obtain an entry-level position as a software engineer where my computational and problem solving skills combined with a strong mathematical background will be applied.

Education

B.S. in Physics, Georgia Institute of Technology, Atlanta, GA, May 2013 GPA 3.7 in major, 3.1 overall

Work Experience

Graduate Teaching Assistant, Georgia Institute of Technology, Atlanta, GA Fall 2013 - Spring 2015

- Taught Physics I and Physics II labs; received high remarks from most students in previous semesters
- Mentor and tutor students enrolled in Physics I and II in the Clough Undergraduate Learning Commons
- Proctor and grade exams

Intern, AnswerRocket, Atlanta, GA

Summer 2014

- Automated a client-side QA daemon using Python, Bash and JSON
- Would query the AnswerRocket server when code was pushed to the Git repository and pinpoint any coding errors or dependency issues if a test failed
- More comprehensive tests could be ran on a timer throughout the day and night and email team members the status on completion
- Verbosity of error reports were an issue on client-side; suggested metadata of detailed error reports sent to my automator's IP

Research

Student Researcher, Naval Research Lab, Washington, D.C.

- Used the Long Wavelength Array 1 (LWA-1) in New Mexico to observe approximately 80 pulsars remotely
- Pulsar search and initial analysis done by PRESTO (written in C), further analvsis performed by Python scripts/programs
- Studied pulse broadening in pulsar B0950+08, allowing us to approximate the sensitivity of LWA-1
- Reference: http://arxiv.org/abs/1410.7422

Undergraduate Researcher, Center for Relativistic Astrophysics, Atlanta, GA Fall 2012 - Spring 2013

- Built a computational model of radiative transfer in neutron star atmospheres
- The "front-end" is written in Python and heavy calculations are done in C
- Vim used for code editing
- SCons used to build the program; Bitbucket used for a versioning system; Doxygen used to document the program
- Coding style based off the paper "Best Practices for Scientific Computing"
- Public Repository: https://github.com/jbbskinny/NSatmo

Academic Dean's List of Distinguished Students, Georgia Institute of Technology, all semesters

Honors Graduated Highest Honors, Georgia Institute of Technology Certificate in Astrophysics, Georgia Institute of Technology

Naval Research Enterprise Internship Program Fellowship

Personal Backpacking and Camping Interests/ Open-source contributions

Interests/ Open-source contribution
Activities Golf

 $\begin{array}{c} \text{Soccer} \\ \text{Xbox} \end{array}$

Computer Languages: Bash, C, Fortran, HTML/CSS, Javascript, LATEX,

Skills MySQL, Python

Software: Git, Mathematica, MATLAB, Mercurial, Vim

<u>Platform:</u> Macintosh (Mac), Ubuntu, Windows

<u>Web Framework:</u> Django, Node.js

GitHub https://github.com/jbbskinny