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 - May 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

- Project initiated to design and implement a Python-based automated regression model
- Program design was to pull from the Git server when a new version of the code was uploaded; if errors detected, an email would be sent to the quality control supervisor
- Studies of results over time indicated the program should have been implemented server-side allowing submission of accurate error reports

Research

Student Researcher, Naval Research Lab, Washington, D.C. Summer 2013

- Used the Long Wavelength Array 1 (LWA-1) in New Mexico to observe approximately 80 pulsars remotely
- Studied pulse broadening in pulsar B0950+08, allowing us to approximate the sensitivity of LWA-1
- Pulsar search and initial analysis was done by PRESTO (written in C); further analysis was done in Python
- 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 assuming local thermodynamic and radiative equilibrium
- The front-end was written in Python and the heavy calculations were carried out in C functions for speed
- Coding style based off the paper "Best Practices for Scientific Computing"
- SCons used to build the program; Bitbucket used for a versioning system; Doxygen used to document the program
- Less than one percent convergence achieved with proper boundary conditions

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

Certificate in Astrophysics, Georgia Institute of Technology Naval Research Enterprise Internship Program Fellowship

Personal Backpacking and Camping

 $\begin{array}{ccc} \textbf{Interests} / & \textbf{Golf} \\ \textbf{Activities} & \textbf{Soccer} \\ & \textbf{Xbox} \end{array}$

ComputerLanguages:Bash, C, Fortran, IATEX, PythonSkillsSoftware:Mathematica, MATLAB, Vim, Git

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

<u>Web Framework:</u> Django (beginner)

GitHub https://github.com/jbbskinny