Austin R. Pahl

2915 Baseline Road Apt 435, Boulder, CO 80303 austinrp.github.io 843-860-4629 austinpahl@gmail.com github.com/AustinRP

EDUCATION

University of Colorado Boulder, CO

August 2018-present

Ph.D. Computer Science (ongoing)

Faculty Advisor: Prof. Eric Rozner (ericrozner.com)

Honors:

Dean's Summer Research Fellowship: Awarded to help kick-start research in areas of need

Honors College, University of South Carolina, Columbia, SC

May 2017

GPA: 3.978/4.0

B.S. Computer Science

Thesis: Google Street View as a Medium for Social Gaming

Honors:

Magellan Grant: University-sponsored fund to support student research

Carolina Scholarship: Top merit-based scholarship for students at University of South Carolina

Phi Beta Kappa Membership: Prestigious national honor society

TEACHING EXPERIENCE

Department of Computer Science, University of Colorado Boulder, CO

Fall 2018

Teaching Assistant, Computer Systems

- Teach a weekly recitation for 43 students majoring or minoring in Computer Science
- · Introduce new tools and concepts relating to computer architecture and help students apply them on projects
- Conduct 1-on-1 interviews with students to assess their knowledge and communication skills
- Track students' progress and work with them outside the classroom to identify and address weak areas
- Contribute to question banks for tests, quizzes, and students' self-evaluations

RESEARCH EXPERIENCE

University of Colorado Boulder, CO

August 2018-present

PhD Researcher

- Investigate new ways to ensure strict resource isolation across containers sharing a host server
- Utilize CloudLab, Docker, and Git to maintain a reproducible, easily benchmarked test environment

USC Center for Digital Humanities, Columbia, SC

January 2016-December 2016

Research Assistant

- Developed an iOS app in Swift that presents the history of a local community
- Received \$3,000 under the Magellan Grant to work on the app with another student
- Built a Django server that exchanges content with the app via JSON formatted data
- Designed a SQLite database through Django to support media and historical data presented in the app
- Continued technical support to the faculty advisors and students after finishing project contributions

Sandia National Laboratory, Albuquerque, NM

May 2016-August 2016

Research Intern

- Contributed to a high performance parallel design application in C++
- Participated, together with 8 team members, in a variation of the Scrum (Agile) development methodology
- Collaborated closely with academic researchers to convert theory to implementation
- Pushed code to a Git repository shared across the enterprise by teams working on the larger software suite
- Ran massively parallel jobs for laboratory staff using our team's software

WORK EXPERIENCE

FAST Enterprises, Nashville, TN

July 2017-July 2018

Implementation Consultant

- Worked as a developer and consultant at the Tennessee Department of Revenue
- Rolled out a software update that improved efficiency and extended functionality of TNDOR tax systems
- Provided post-rollout code fixes and desk-side support to call center staff
- Gathered requirements from SMEs to meet client's needs for the tax processing software
- Cooperated with teammates to ensure product was delivered on time and on budget
- Presented a technical brown bag talk to staff on a new internal tool recently launched by FAST

The Boeing Company, St. Louis, MO

May 2015-August 2015

Programmer Analyst Intern

- Produced a new version of an internal Java Struts application for data visualization
- Applied object-oriented design principles to a large legacy codebase in Java 6
- Restructured the backend to support more customers without impacting deployment costs
- Translated design documents from management into a functional system
- Wrote unit tests for existing and new code using the JUnit framework

ACADEMIC SPEAKING ENGAGEMENTS

Gave a talk explaining the *Ward One* project at UNRH 2017 at Washington & Lee University. We discussed the historical research and interviews conducted to compile content, as well as the design and implementation of an app to present the information.

Dao, S., Pahl, A., & Harris-Lowe, B. (2017, January 21). Ward One. Speech presented at Undergraduate Network for Research in the Humanities (UNRH) Conference at Washington & Lee University, Lexington, VA.

Presented a poster detailing the implementation of the *Ward One* iOS app and web database at USC's Discovery Day, an event that showcased research, scholarship, and leadership from every campus in the USC System.

Dao, S., & Pahl, A. (2016, April 22). *Enhancing Interactor Experience in the Ward One App*. Poster presented at Discovery Day at University of South Carolina, Columbia, SC.

SKILLS & INTERESTS

Computer: Windows/MacOS/Linux, Microsoft Office, Git, Bash

Development: C/C++, Java, Python, VB.NET, SQL Server, MPI, OpenMP, Hadoop MapReduce, R plotting

Business: Scrum/Agile, consulting (gathering requirements, product demos, desk-side support)

Language: Basic Spanish & Mandarin

Interests: Volunteered as a page at the Nashville Public Library for 10 months, finding opportunities in Boulder