apeterso@andrew.cmu.edu [phone available upon request]

EDUCATION Bachelor of Science in Computer Science

Carnegie Mellon University, Pittsburgh, PA, expected May 2015

GPA: 3.65/4.0 Minor: Physics

West Ranch High School, Stevenson Ranch, CA, graduated 2011 GPA: 4.79/4.0 (Weighted) - Valedictorian: Rank 1 out of 503

RELEVANT COURSEWORK

Fundamentals of Programming, Principles of Imperative Computation, Principles of Functional Programming, Introduction to Computer Systems,

Great Theoretical Ideas in Computer Science, Foundations of Cyber-Physical Systems*, Parallel and Sequential Data Structures and Algorithms*, Principles of Software Construction*

(* denotes current classwork)

EXPERIENCE

High Performance Systems Integration Intern

May 2013 to August 2013

Los Alamos National Laboratory, Los Alamos, NM

- Created an analysis framework for a Parallel Log-Structured File System in Python and C with MPI
- Allowed users and developers the ability to view their files at scale through graphs of I/O behavior
- Presented poster showing results at the Computing and Information Technology Student Mini Showcase

Research Assistant

January 2013 to December 2013

School of Computer Science, Carnegie Mellon University, Pittsburgh, PA

- Advisor: Garth Gibson in the Parallel Data Lab
- Conducted research in memory debugging Hadoop programs
- Received funding from the Semiconductor Research Corporation through the Undergraduate Research Office

Quality Control Intern for the Secondary Reachback Program Sandia National Laboratory, Livermore, CA

May 2012 to August 2012

• Supervised the implementation of unit-based tests:

- - Learned and researched new languages, such as PHP, C++, and Javascript
 Coded and documented tests
 - Headed up the intern testing initiative and managed three other interns
- Presented poster showing results of internship at Summer Intern Symposium

Peer Tutor August 2012 to current

Carnegie Mellon University, Pittsburgh, PA

- Tutored other students in physics and computer science
- Certified by the College Reading & Learning Association

Mentor for Physics Concepts Outreach Program

August 2012 to December 2012

Carnegie Mellon University, Pittsburgh, PA

• Mentored two middle school students in a physics science fair project through a hands-on experiment

SKILLS

Computer Languages and Operating Systems: Python, C, SML, Java, LaTeX, Unix Languages: French (5 years), Spanish (5 years)

HONORS

Dean's List - May 2012, December 2012, May 2013 Dean's List with High Honors - December 2011

Valedictorian of West Ranch High School - May 2011

National AP Scholar Award - May 2011 Girl Scout Silver Award - April 2007 West Ranch PAC Scholarship - May 2011

West Ranch National Honors Society Scholarship - May 2011