Kavon Farvardin

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Research Interests

Concurrent and functional programming languages and their implementations.

Education

University of Chicago — **2014 – present**
Ph.D. in Computer Science

Pennsylvania State University — **2009 – 2014**
B.S. in Computer Science
B.S. in Mathematics

Research Experience

Penn State Applied Research Laboratory

Research Staff — **May 2014 – Aug 2014**
Distinguished Undergrad Researcher — **May 2012 – May 2013** ∪ **Jan 2014 – May 2014**
Performed the duties of a primary developer to research, create, and fix features in a 3D data visualization program.

Pennsylvania State University

Undergraduate Researcher — **Aug 2009 – Aug 2011**
Worked with a professor on pedagogical research in computer science. I assisted in the design and creation of new features for an educational software tool, which uses a graphical tracing method to help students understand fundamental concepts of programming. We ran an experiment in a computer science course and published our results.

Teaching Experience

CMPSC 450 — Concurrent Scientific Programming

Learning Assistant — **Spring 2014**, Penn State
Filled in for a lecture, graded homework, and held office hours.

CMPSC 461 — Programming Language Concepts

Teaching Intern — **Spring 2013**, Penn State
Prepared and gave the lectures for the class on compilers, context-free and regular languages, memory management, garbage collection, and Prolog. I also prepared the homework assignments and held office hours.

CMPSC 121 — Introduction to Programming Techniques

Teaching Intern — **Fall 2012**, Penn State
Gave lectures for two sections of the course. The topics I covered include Boolean algebra, sorting and searching algorithms, and basic data structures. I additionally prepared assignments, held office hours, and conducted review sessions before exams.

Industry Experience

Intel Corporation

Software Engineering Intern **June 2013 – Dec 2013**

Worked in a hardware validation software tools team on an LLVM based compiler. My tasks were primarily to find and sometimes fix bugs in the compiler.

Publications

Warms, T. M., Q. Duan, and **K. Farvardin** Can Using A Formal System For Tracing Computer Programs Help Students Learn Introductory Computer Science? *Proceedings of The 2011 IAJC-ASEE International Joint Conference*

Posters

Farvardin, K. and T. M. Warms RandomLinearizer: A Computer Program Tracing Method *Penn State Abington 2011 Undergraduate Research Poster Fair*

Familiarity

Languages: C, C++, Java, LaTeX, Prolog, Python, Scheme, Standard ML, x86 Assembly

Tools: Ant, Eclipse, Git, GDB, Make, Subversion, Valgrind