Paul Krogmeier | CV

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Pursuing master's degree in computer engineering from Purdue University. Seeking PhD opportunities in computer

Experience

OPLSS 2017 Eugene, Oregon

Oregon Progamming Languages Summer School

June 2017

Attended research lectures from experts in Programming Languages and Formal Methods. Took part in hands-on sessions for learning about current research software and techniques: Idris, PLT Redex, Concurrent CO

Deep Learning West Lafayette

Purdue E-lab Sept. 2016-Dec. 2016

Experimented with Torch7 deep learning framework to find solutions to reinforcement learning problems.

Software for HPC cluster administration

Medellin, Colombia

APOLO computing group

May 2016-July 2016

Developed software to produce client usage reports for a Linux Rocks cluster administrative team.

- Wrote python scripts to query cluster load and usage patterns and to present gathered information clearly and
- Interfaced with TORQUE and SLURM resource management systems

Embedded systems programming

West Lafayette

Purdue OADA undergraduate research team

May 2014-July 2014

Developed software for a wireless, embedded semi-truck weight sensing application. The goal was to provide a way for truck drivers to quickly learn the weight of their load through an app interface that communicated wirelessly with an embedded circuit board.

- Interfaced Nordic nRF51822 SoC to air pressure sensors over I2C
- Programmed communication between Andriod application and SoC using Bluetooth Low Energy stack

Education

Purdue University M.S. Computer Engineering, GPA: 3.98 West Lafayette

2016-present

- Teaching Assistant:
 - · ECE 369 Discrete Math
- Masters Project ('Formalization of Fiat in Coq'): I'm working on proving type safety for the Fiat specification language in Coq. Additionally, I'm exploring the potential for synthesis of performant Haskell code from high level specifications.

Undergraduate **Purdue University**

West Lafayette 2012-2016

B.S. Computer Engineering, GPA: 4.0 **EAFIT** University

Medellin, Colombia

Study Abroad, Compilers and Operating Systems courses

Spring 2015

Coursework

Graduate

CE 608 – Computational Models and Methods

 ${\sf CE~600-Probabilities~and~Random~Processes}$

CS 565 - Programming Languages

CS 590 – Artificial Intelligence and Causal Inference

CS 584 – Theory of Computation and Complexity

CS 573 – Data Mining

Undergraduate

CE 368 - Algorithms and Data Structures

CE 369 - Discrete Math

CE 364 – Python and Bash Scripting Lab

CE 337 – ASIC Design Laboratory

CE 437 - Computer Architecture

CE 477 – Digital Systems Senior Design

Technical and Personal skills

o Programming Languages:

Proficient in: C/C++, Python, Matlab, and Verilog

Basic experience with: SML, Idris, Racket, x86 ISA, MIPS ISA, Java, Lisp, Jekyll/HTML/(S)CSS

o Research Software: Coq, Rosette, Sketch, Fiat

o Natural Languages: Fluent in Spanish, German, and English (native)

o Other: Lead alto saxophone player in Purdue University Jazz Band

Awards

o Purdue Ross Fellowship: May 2016

o 100K Strong in the Americas Scholarship: August 2014