mnico@seas.upenn.edu

## **EDUCATION**

## University of Pennsylvania, Philadelphia, PA (Class of 2013)

School of Engineering and Applied Science, Bachelor of Science in Engineering (BSE) Candidate Computer Science Major, Engineering Entrepreneurship Minor

## The Lawrenceville School, Lawrenceville, NJ (Class of 2009)

Honors: Winner of Herman Hollerith Prize for "the most creativity, ingenuity, or entrepreneurial flair in the application of computer science," Varsity Crew Team Captain, Prefect

## SKILLS

C/C++, Javascript, HTML5/CSS3, Python, OCaml, Java, PHP, Bash, Ruby on Rails, LATEX, X86 Assembly, Verilog, GNU/Linux, OSX, Windows

#### ACTIVITIES

## University of Pennsylvania

Division 1 Varsity Lightweight Crew Team: Rower (September 2009 - Present)

Theta Xi Fraternity, Omicron Chapter: Treasurer, Webmaster, Member (January 2010 - Present)

Interfraternity Council: Vice President of Administration (January 2011 - January 2012)

SIGGRAPH Game Development Club: Member (September 2011 - Present)

# TECHNICAL EXPERIENCE

# Software Engineering Intern at Brothersport Games, Palo Alto, CA (Summer 2012)

Designed and implemented a sports game for mobile. Worked closely with one other engineer, two artists, and founder. Used HTML5 Canvas and Javascript.

# Teaching Assistant at University of Pennsylvania, Philadelphia, PA (Fall 2011)

Administered lab sections and office hours. Graded for Programming Languages and Techniques 1.

## Intern at Régie Autonome des Transports Parisiens, Noisy-le-Grand, France (Summer 2011)

Built web applications as a member of a team of four employing Agile software development methods using PHP, HTML, CSS, and Symfony.

## PROJECT EXPERIENCE

## PennOS (Fall 2012)

Shell based operating system and filesystem implemented on a host operating system. Written in C.

## MiniMaya (Spring 2012)

3D graphics modeling and rendering program in the spirit of Maya in C++, OpenGL, and QT.

# Superscalar Pipelined Processor (Spring 2012)

5-stage pipelined, 2-way superscalar processor for Penn's LC4 instruction set. Used Verilog for implementation and tested on a Virtex-II Pro FPGA board with PowerPC 405 cores.

## **OAT Compiler** (Spring 2011)

Compiler for a Java-like OO language written in OCaml that compiled to X86 assembly. Included Control Flow, Procedures and Arrays, Objects, and Inheritance. Worked with the generated assembly.

## Additional Experience

DJ at Smokey Joe's, Philadelphia, PA (September 2012 - Present)

Counselor at Penn Crew Camp, Philadelphia, PA (Summers 2010 - 2011)

Sales at Clearwire LLC, Philadelphia, PA (April 2010 - October 2010)

Farmhand at Private Farm, New Hope, PA (Summers 2007 - 2009)

#### Interests

Computers, video games, rowing, playing piano and guitar, cooking, biking, traveling