## **Ethan Madden**

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**EDUCATION** Purdue University, West Lafayette, Indiana

**Expected Graduation December 2014** 

Concentration: Network Engineering Technology

August 2011 - Present

University of Southern Indiana, Evansville, Indiana

Concentration: Computer Science

August 2009 - May 2011

**SKILLS** 

Languages: C, C++, C#, Java, Python, Bash, Arduino (Processing), LATEX Familiar With:

- Compiling and running scientific applications in a cluster environment
- Microcontroller Development

**EXPERIENCE** 

Student System Administrator

September 2011 - Present

Rosen Center for Advanced Computing

- Diagnosed and repaired cluster, legacy, and storage systems
- Wrote scripts to aid in diagnosing issues
- Maintain several current and former Top500 List Clusters

EXTRA-CURRICULAR ACTIVITIES ACM Special Interest Group for Robotics Software Team Leader, Head of Outreach September 2011 - Present

- 2<sup>nd</sup> Place in the Programing Skills competition at Vex World Championshiops 2013
- Teach students to control microcontrollers using C
- Developed dynamic robot mapping environment for Autonomous mode
- Drove one of the teams robots in both the 2012 and 2013 seasons

Student Cluster Competition

September 2012 - Present

Member

 Compiled and ran Molecular Dynamics Simulations at SC 2012 (LAAMPS) in Salt Lake City, Utah and ISC 2013 (GROMACS) in Leipzig, Germany

**Projects** 

OpenLibrary

Spring 2013

- Developed a Library Database Management System
- Utilized Amazon Product Advertising API to dynamically fetch book, movie, CD, and game data from Amazon
- Developed in C# with hooks into a Microsoft Access Database

Custom Keyboard

Summer 2013 - Present

A variety of Cherry MX Switches processed by a Teensy3 Microcontroller running custom firmware