

## Ethan Madden

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### EDUCATION

*Purdue University,*  
West Lafayette, Indiana  
Expected Graduation Spring 2015  
Major: Computer and Information Technology  
Concentration: Network Engineering Technology

August 2011 - Present

*University of Southern Indiana,*  
Evansville, Indiana  
Major: Computer Science

August 2009 - May 2011

### SKILLS

*Languages:* C, C++, C#, Java, Python, Bash, Arduino (Processing),  $\text{\LaTeX}$   
*Familiar With:*

- Oracle SQL and Microsoft Access SQL Databases
- Compiling and running scientific applications in a cluster environment
- Microcontroller Development

### EXPERIENCE

*Student System Administrator*  
Rosen Center for Advanced Computing

September 2011 - Present

- 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 Programming Skills competition at Vex World Championships 2013
- Teach students to program 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*  
Member

September 2012 - Present

- 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

- Cherry MX Switches processed by a Teensy3 Microcontroller running custom firmware

For more information and source code for my projects,  
see my website [www.maddene.com](http://www.maddene.com)