Michael Patterson

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Portfolio: http://mjpatter88.github.io
Recent Code: https://github.com/mjpatter88
LinkedIn: http://www.linkedin.com/in/mjpatter88

Education:

Iowa State University Ames, Iowa
Major: Computer Engineering
Spring 2013 - Masters of Science Degree with Thesis: 3.86 GPA
Spring 2011 - Bachelors of Science Degree: 3.91 GPA

Cedar Valley Christian High-School Cedar Rapids, Iowa
GPA: 4.35/4.0
ACT: 36/36
National Merit Scholar

Work Experience:

Rockwell Collins – Summers 2006-1010 Cedar Rapids, Iowa
As a technical intern, I developed and tested software for satellite communication systems. I set up and maintained hardware in specific testing configurations, generated detailed testing documentation and cross-linked it to requirements using DOORS, and wrote software to automatically generate Python test scripts based on a user's input.

Research at Iowa State University – 2010-2013 Ames, Iowa
As both an undergraduate and a graduate researcher, I surveyed the current research in the hardware security field. I worked with the GNU Radio and the USRP to investigate electromagnetic emissions from keyboards, developed and tested Physically Uncloneable Functions (PUFs) in VHDL, and discovered several vulnerabilities in modern GPUs. View my M.S. Thesis at http://lib.dr.iastate.edu/etd/13115/.

Teaching at Iowa State University – 2010-2013 Ames, Iowa
As an undergraduate teaching assistant, I taught two semesters of "Advanced Programming in C and C++." As a graduate teaching assistant, I taught three semesters of assembly programming and processor design/implementation in VHDL for a "Computer Organization and Assembly Level Programming" class.

CRU – 2014-2015 Orlando, Florida
I've traveled to 12 different countries, taught English and basic health/sanitation, partnered with indigenous organizations, and recorded tribal language versions of the Bible.

Software Developer at Igor – August 2015 Des Moines, Iowa
I briefly worked as a firmware developer at a "smart-lighting" startup. I practiced agile methodology and test driven development to begin implementation of a firmware network bootloader.

Computer Skills:

C, Java, Python, C#, C++, VHDL, Web Development (HTML, CSS, JS, PHP), CUDA, ASM, Windows, Linux, Visual Studio, gcc/make, SVN, Git, Vim.