Steven Tso

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SUMMARY

A passionate, well-rounded, and experienced computer systems engineering senior with a multitude of different expertise and experiences **seeking a full-time opportunity**

EDUCATION

University of Massachusetts Amherst, Amherst, MA — GPA 3.65/4.0
Bachelor of Science in Computer Systems Engineering — Anticipated May 2014
Minor in Engineering Management

SKILLS

Proficient Languages: C | Java | VB.NET | C#
Software: Visual Studio | Eclipse | Git | CLI | Quartus | Wireshark | PSpice
Platforms: Microsoft Windows | Mac OS X | Linux
Others: Multithreading | Verilog | SQL | LINQ | HTML | CSS

EXPERIENCE

TeraDiode, Wilmington, MA — Summer 2013
Software Engineer Intern
Rapidly expanding Startup Company that specializes in high-powered laser cutting

- Worked as a lead in developing **computer vision** software in **C#** using the AForge.NET framework
- **Architected** a back-end framework using fundamental **object-oriented design** paradigms and a **XML** framework to easily allow developers to integrate different cameras into new and existing software
- Wrote multiple back-end camera **drivers** in this system using **multithreading** techniques
- Wrote a fast performing algorithm for creating a **nonlinear least squares fit** equation that is used to determine the quality of the laser beam for every laser that is shipped to customers
- Facilitated in **saving thousands of dollars** by allowing the engineers to switch over to an in-house solution for their cameras and tools from an expensive and poorly supported out-of-house camera and tools solution currently used in R&D and production
- **Reduced** server load and SQL query time by localizing queries into local memory

Lutron Electronics, Inc., Coopersburg, PA — Summer 2012
Engineering Intern (Windows Systems)
Global leader in lighting control systems with an expanding market in shading control systems

- Established a multitude of skills including, but not limited to **agile software development**, **version control**, **code review**, and **cross-team communication**
- Remodeled software in **C** for RF Shades that allows multiple versions of the product to utilize common software **significantly reducing overhead costs** from manufacturing error
- Added features to existing PC tools to greatly simplify and reduce on-site time for technicians to install/repair shades resulting in better **satisfied customers**
- **Directed** a PowerPoint presentation based off an Excel spreadsheet I created to correlate events related to shade data to upper-level management

PROJECTS

DragonFire — Winter 2013 – Spring 2013

- Designed and implemented an embedded system capable of **logging x, y, and z-axis motion** requiring extensive knowledge in low-level C, ARM core processors, and SD card technical specs
- Developed software in **Python** to analyze the log with a front-end GUI design using wxPython

Network Interface — Spring 2013

- Using **FPGA**s, **Verilog**, and **C**, developed capabilities to allow data packets representing image data to be sent over a Ethernet line using the OSI Model abstraction

Royal Crown Casino Gambling — Fall 2012

- Designed a gambling program in **C++** with a team of 4 developers while coordinating logistics, mediating discussions, and reinforcing positive feedback
- Developed portions of the **core code** and **GUI** for the game Gin Rummy
- Documented software using **UML** diagrams and commenting code

Pipeline Simulator — Fall 2012

- Implemented a **C** program in a team environment to **simulate a 5-stage MIPS pipelined processor** with different configurations to see where bottlenecks can occur

RELEVANT COURSES

Embedded Systems I, II	Computer Architecture & Design	Electronics I
Software Intensive Engineering	Computer Networks	Circuits