**SAMUEL LICHTENHELD**

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**OBJECTIVE**

Seeking an internship or co-op in embedded systems, computer architecture, or logic design.

**EDUCATION**

**Bachelor of Science in Computer Hardware Engineering** *Dec 2016*

University of Florida, Honors College *GPA: 3.62*

**INTERNSHIPS**

**Northrop Grumman,** Hill Air Force Base, UT *May 2015 – August 2015*

Electrical Engineering

* Reverse-engineered a portion of the guidance circuitry found in the Minuteman III missile
* Conceived a method to extract data from OrCAD PSpice files no longer supported
* Analyzed the effects of radiation on circuits using the TREE method

**PROJECTS**

**Hardware**

* Designed a space arcade video game in VHDL using an FPGA and a VGA connection
* Programmed a microprocessor to interface with a Samsung TV remote in C and assembly
* Devised an 8-bit computer using VHDL on an FPGA

**Software**

* Instituted the back-end of a journal application in C++, which created a file storage system for separate users that was password protected, encrypted, and searchable
* Created a custom B-Tree class using C++
* Authored a text adventure game in Java

**SKILLS**

**Computer Languages**: Assembly Language, C++, Java, VHDL

**Computer Programs**: Altium Designer, Atmel Studio, MATLAB, PSpice, Quartus, R, SolidWorks

**Language**: English (native); German (fluent)

**ACTIVITIES**

**Member,** *Machine Intelligence Laboratory August 2014 – May 2015*

* Refined a hot swappable battery system, which powers the wireless router needed to communicate with the PropaGator, to inform the user when new batteries are required.

**Member**, *Gator Motorsports* *August 2013 – May 2014*

* Developed skills using the lathe and mill

**Member**, *Theta Tau Professional Engineering Fraternity May 2014 – Present*

**VOLUNTEERING**

**Highschool Outreach,** Clearfield Area, UT

* Assisted middle schoolers in the creation of air-propelled rockets to stimulate their interest in STEM academics

**Shake-A-Leg Miami,** Miami, FL

Mentor/Teacher's assistant *May 2009 – August 2011*

* Taught sailing, swimming and kayaking to children with physical, developmental and economic challenges, accumulating more than 1,000 hours of community service

**RELEVANT COURSEWORK**

* Microprocessor Applications
* Digital Design
* Digital Logic and Computer Systems
* Data Structures and Algorithms
* Introduction to Computer Organization
* Programming Fundamentals I & II
* Introduction to Signals and Systems
* Circuits 1