# William A. Martens

44 Terrace Blvd, West Seneca NY 14224 (716) 712-7146 wmartens@buffalo.edu www.linkedin.com/in/willmartens91

# **Work Experience**

#### 2016 – 2017 Research Assistant, University at Buffalo

- Designed, implemented and maintained custom hardware
- Hardware based on the ESP8266 utilizing RFID technology, coded mainly in C
- Created and presented a research poster for the 2016 ASEE Conference

### 2016 – 2017 **Teaching Assistant, University at Buffalo**

- Responsible for grading, recitations, office hours and lab work
- Class sizes ranged from 30 to roughly 150 students
- Topics included MIPS/ARM assembly, Verilog, VHDL, and several introductory CS courses

#### 2010 – Current Sales Associate, RadioShack

- Responsible for sales, diagnostics, and repair of various consumer-grade electronics
- · Responsible for advice and lessons on hobby components and circuits
- Held several classes on introductory soldering and electronics

## **Projects**

### 2015 **Hologram Generator**

- Worked on a four man team to design and build a hologram generator
- Built within 24 hours from scrap components
- Demo games written in C# using Unity as an engine
- 2nd Place winning entry at the 2015 UB Hackathon

### 2016 **Ms Q\*Bert**

- Worked on a two man team to code a clone of the arcade game "Q\*Bert"
- Coded in bare ARMv7 assembly, complete with color graphics

### 2017 **Teddy Bear Talker**

- Worked on a four man team to design and build a rugged teddy bear to talk on behalf of a young girl
- Hardware based on the Raspberry Pi Zero W, utilizing flex sensors and an attached RTC module
- Case designed in OpenSCAD, flex sensor polling written in Python

### 2017 Mini Tag Writer

- Rewrote the tag generation program for RadioShack
- Script processes Excel files using several Python libraries and generates standard and sale tags for all RadioShack merchandise

#### **Education**

#### **University at Buffalo**

(2013 – 2017) BS Computer Engineering GPA: 2.9

### **Skills**

C/C++

Assembly(MIPS & ARM)

GDB/Python/Bash Scripting

VHDL/Verilog

**MATLAB** 

OpenSCAD/LaTeX

Microcontroller Programming

Leadership & Mentoring

#### **Volunteer Work**

Taught various STEM outreach events at Alden Primary and Intermediate Schools

Participated in various engineering outreach events at the University at Buffalo

Held multiple circuitry and drone building classes at RadioShack