Andrew Ramsey

Curriculum Vitae

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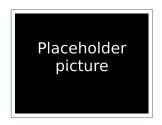✉ axr8451@rit.edu
 ARamsey118
17. October 1995, Los Angeles

Placeholder picture

Computer Engineering student interested in the fields of RF and DSP. Enjoys learning new subjects and applying them to the work at hand.

Education

Aug. 2014 - Present	**Computer Engineering**, *Rochester Institute of Technology*, Rochester, NY. GPA: 3.96, Honors.
Aug. 2010 - June 2014	**High School Diploma**, *College Park High School*, Pleasant Hill, CA. GPA: 4.00.

Computer Skills

Languages:	VHDL, C, Verilog, Python, Assembly, LaTeX, Bash
Software:	Linux, Vivado, ISE, ModelSim, OrCAD PSpice, Quartus II, GNURadio, Git
Hardware:	FPGAs, SDRs, Cortex-M0+, Oscilloscope, Multimeter, Function Generator
Interests:	Hardware Design, Digital Signal Processing, Embedded Systems, Open Source

Jobs

May 2016 – Present	**Computer Engineering Intern**, *Parsons Corporation*. Designing FPGA programs and software defined radio based applications ○ Writing, integrating, and testing prebuilt and custom IP to create a complete FPGA design ○ Generated spec-compliant radio transmissions based on decoded data ○ Replaced GNURadio with a custom, lightweight version using only C
Aug. 2015 – Present	**Teaching Assistant & Mentor**, *Rochester Institute of Technology*. Assist first-year students in lab exercises and adjusting to college ○ Explained digital design concepts in a straightforward manner ○ Rewrote lab handouts to be understandable and self-contained ○ Graded lab exercises and reports

Projects

Dec. 2015 - Present
Mastermind.
The game of Mastermind on the Freescale Freedom KL46Z
- Designing a PCB to use as an outreach tool for children
- Wrote mixed C and ARM Assembly to provide software functionality
- Enhanced the game using RGB LEDs for feedback

Oct. 2014 - Present
Clue.
An effort to recreate the board game Clue on the computer in C
- Learning how to create complex data structures in C
- Developed a decision model based on real world experience
- Self taught graph theory principles

Nov. 2014 - May 2015
Freescale Car Competition.
Built and programmed an autonomous car to compete in an international race
- Developed with MATLAB, Simulink, and mbed
- Processed data in real time to keep the car on track
- Learned to work with others' code

Extracurriculars

Jan. 2007 - Present
Eagle Scout, Assistant Scout Master.
Volunteering with a local Boy Scout troop
- Teach middle and high school boys life and outdoor skills
- Managed other scouts in order to complete projects

Sep. 2016 - Present
Launch Initiative, *Avionics*.
A club that focuses on the building and launching of rockets
- Creating a groundstation to establish ongoing comms with the rocket
- Processed RF signals with an SDR to gather telemetry data on the flight

June 2013 - Jan. 2016
Contra Costa County Sheriff's Search and Rescue.
Volunteered with the sheriff's office to find lost people
- Reunited numerous people with their families
- Saved sheriff's office two million dollars each year
- Trained new recruits to perform their job duties

Languages

English	Native Speaker	
German	Intermediate	*4 years in high school and an immersion in college*
American Sign Language	Beginner	

12. January 2017