

Andrew Ramsey

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www.github.com/ARamsey118

Education

- Aug. 2014 – Present **Computer Engineering, Rochester Institute of Technology**, Overall GPA: 3.96, Honors
- Digital System Design I/II with Lab
 - Assembly Language with Lab
 - Circuit I/II with Lab
 - Electronics I with Lab
 - Interface and Digital Electronics
 - Digital Signal Processing
 - Computer Organization/Architecture
 - Applied Programming
 - Digital IC Design
 - Reconfigurable Computing
 - Data Networks and Communications
 - Senior Design I

Computer Skills

- Languages: C, VHDL, Verilog, Python, Assembly, LaTeX, Bash
- Software: Linux, Vivado, ISE, ModelSim, OrCAD PSpice, Quartus II, GNURadio, Git, Vim
- Hardware: FPGAs, SDRs, Cortex-M0+, Oscilloscope, Multimeter, Function Generator

Jobs

- May 2017 – Aug. 2017 **Research Assistant, Technische Universität Dortmund**
- Researched autonomous drone navigation via computer vision and ultra-wideband positioning
- Scaled computer vision-based location using curve fitting
 - Achieved autonomous, scale accurate flight using only a single camera
 - Overcame language communication barriers to work in an international setting
- May 2016 – Jan. 2017 **Computer Engineering Intern, Parsons Corporation**
- Designing FPGA programs and software defined radio based applications
- Wrote, integrated, and tested 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
- Developed a decision model based on real world experience
 - Self taught graph theory principles

Extracurriculars

- Eagle Scout Award, Assistant Scout Master
- Contra Costa County Sheriff's Search and Rescue
- FAR OUT Rocketry – Avionics