

RICARDO ANGELI

resume@rangeli.net • Visit my tech blog at www.rangeli.net

Seeking Electrical/Computer/FPGA Engineer full-time position beginning July 2016 • Willing to relocate

EDUCATION

University of Central Florida GPA: 3.41 (GPA in Major) Orlando, FL
Working towards: Bachelor of Science, **Electrical Engineering** August 2014—May 2016
Working towards: Bachelor of Science, **Computer Engineering** August 2011—May 2016
Martin County High School Stuart, FL August 2007—May 2011

SKILLS

Computer languages/programs/operating systems (including, but not limited to):
Verilog, C, C++, C#, Java, Python, Unity3D, SQL, Arduino, Android, ARM C & Assembly, MIPS Assembly, x86 Assembly, MSP430 C & Assembly, AVR C & Assembly. KiCAD, Xilinx ISE, MS Office, Multisim, Matlab, Photoshop; Windows, OSX, Linux (Mint, Ubuntu, Debian, Raspbian).

EXPERIENCE

Senior Capstone Design Project: Bragg Optical Spectrum Analyzer Orlando, FL
Electrical Engineer & Student August 2015—May 2016

- Working with three others to design and implement a device to measure the spectrum in an optical signal.
- Designed electronic component to read analog signals from an optical sensor, process them in an ARM microcontroller, and display the data by communicating to a computer application via USB.
- Coding the microcontroller firmware in C and the computer application in C#.

Advanced Field Programmable Gate Array Design Orlando, FL
Independent Student January 2016—May 2016

- Planned project for independent study based around FPGA design of a microprocessor on Verilog.
- Project is broken up into five parts including designing the arithmetic logic unit, implementing arithmetic opcodes, implementing memory and stack-based instructions, designing an I/O interface, and testing using an assembly program. Design is based around the classic MOS 6502 microprocessor.
- Merges knowledge from previous courses: Computer Architecture, Digital Systems, and FPGA Design.

Field Programmable Gate Array Design Orlando, FL
Student August 2015—December 2015

- Designed, documented, and tested six FPGA projects in Verilog as part of graduate-level coursework.
- Projects included displaying to a VGA monitor, designing video filters, and decoding JPEG bitstreams.
- Used Xilinx ISE to code, implement, model, and simulate FPGA designs in Verilog HDL.
- Studied routing and placement algorithms, FPGA architectures, and technology mapping.

Object Oriented Programming: Mobile Game Design Project

Orlando, FL

Software Engineer & Student

May 2014—July 2014

- Worked in a group of four to design and code an Android mobile game using the Unity 3D engine.
- Designed project using UML diagrams and coded it in C#. Implemented pair-programming strategies.

Lockheed-Martin College Work Experience Program (CWEP)

Orlando, FL

Software Engineering Intern

May 2012—December 2012

- Worked up to 30 hours/week with a team in charge of support for a missile guiding system (M-TADS).
- Job required background check to determine my eligibility to obtain security clearance.
- Designed and implemented from the ground-up, a new computer program in C# to manage the customer entries and interface with a SQL server that my partner was designing.
- Designed the program using the flowcharts provided by coworkers and by interviewing end users.

The Learning Environment and Academic Research Network

Orlando, FL

Research Apprentice

August 2011—April 2012

- Selected to participate in a year-long program designed specifically for first-year STEM majors at UCF. Exposed me to the world of research in computer science and to graduate-level work.
- Worked under Dr. Kenneth O. Stanley on the field of evolutionary neural networks and developed a computer program written in C# whose purpose was to alter the structure of a network.

Fermilab National Accelerator Laboratory

Batavia, IL

Summer Intern

June 2010—August 2010

- Worked in a paid summer internship program in which six high-school students with computer programming and robotics experience were assigned specific two-person group projects.
- Developed software alongside my partner to gather data from a pair of phototubes—much like the ones used in the particle accelerator. Also worked studying the motion of a double-pendulum.
- Presented our work to Fermilab physicists at the conclusion of the program.