

Andrew Sousa

Email Address: acsousa@umass.edu

Phone # and address have been suppressed for web

An ambitious *electrical engineer* with demonstrated academic excellence, combined with robust communication and teamwork skills, who possesses a passion for electronics, network systems, and *innovating the future.*

EDUCATION:

University of Massachusetts Amherst

Bachelor of Science in Electrical Engineering

Commonwealth Honors College, Departmental Honors

Abigail Adams Scholarship, AP Scholarship Award

Anticipated May 2015

GPA: 3.6

WORK EXPERIENCE:

Verizon Wireless, Network Engineer

Summer 2013

Network Evaluation

- Troubleshoot KPI issues: increases in latency, jitter, and error codes with the data performance team.
- Built virtual sites to monitor interfaces between various network components in N.E. distribution center.
- Worked with NetScout (vendor) to troubleshoot various issues we had; memory limitations on sites.
- Presented this data on a web interface for operations and other engineering teams to easily use.

Webserver Design

- Implemented a web server design that contains data measurements, technical tools, and network KPI's.
- Used PERL, Expect, Javascript, and php scripts to pull diagnostic data from network nodes.
- Presented this data using innovative dashboards encompassing dynamic features for increased usability.

UMass School of Education, IT Tech

September 2012-June 2013

- Manage and support 1,500 assets, 80 faculty and 30 staff.
- Work with network hardware and computer hardware/software to troubleshoot and resolve issues.

IEEE Ohms Snack Shop, Founder & Manager

September 2013 - Present

- Transformed a small idea into a functional business that benefits the ECE community and UMass IEEE.

TECHNICAL PROJECTS:

IEEE MicroMouse Project

Spring 2013- Present

- Leading a group of four student engineers tasked with designing an autonomous robotic 'mouse' that will locate and navigate to the center of a 16 x 16 maze.
- Design hardware to idealize speed without sacrificing reliability, and formulate an algorithm to find the center by the fastest route. We will enter it into the IEEE MicroMouse competition.

Circuit Analysis Lab/ Intro to Engineering

Spring 2013, Fall 2011

- Analyzed various analog filtered, amplified, and attenuated signals using an oscilloscope and other tools.
- Built circuits with multiples circuit components including op-amps, and/or gates, and 555 timers.
- Communicated results to class by a presentation and wrote a technical paper describing the functionality.

Engineering Workshop

Fall 2011- Spring 2012

Designed a circuit board and sent it to a fabrication plant for professional PCB manufacturing.

- Learned about Linux OS, Arduino language, Eagle as well as the toner transfer method (for PCB).
- Created an LED low/band/high-pass filter circuit to present audio as a visual media.

SKILLS:

- Java, C, Verilog, Expect, PERL, PSpice, Eagle, MATLAB, MIPS, Arduino(C/C++), HTML, CSS
- Entrepreneur, IT Troubleshooting, Management, CMDA & LTE Networks, Xcode

RELEVANT COURSES:

Java Programming & Data Structures, Circuit Analysis I & II, Computer Hardware Architecture. Currently:

Signals & Systems, Semiconductor Devices/Materials, Nonlinear Circuit Design I, Computer Systems Lab I

GROUPS & INTERESTS: Vice-Chair IEEE, Former Vice-Chair ESAC, Ski/Board Club, fitness, football