Sean D. Wilson

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OBJECTIVE

An internship in computer engineering focusing on Digital Signal Processing and Communications

EDUCATION

University of Colorado, Boulder, CO
Bachelor of Science, Electrical and Computer Engineering, expected May 2015
G.P.A. 3.728/4.0

Electrical Engineering Subjects	**Applied Mathematics Subjects**
Digital Signal Processing Lab	Markov Processes
Concurrent Programming	Linear Algebra
Dynamic Programming	
Computer Organization	

COMPUTER SKILLS

- Programming Knowlege: C, C++, Java,Matlab, Mathematica, Bash, Visual Basic, Verilog, LaTeX, and Assembly for Nios II and Arm architectures
- Experienced with Unix, Linux, and Windows operating systems
- Experienced with Modelsim, LTspice, and Multisim
- Programmed with ARM Cortext-M0 and Arduino microcontrollers
- Experienced with version control software, GIT

PROFESSIONAL EXPERIENCE

Lucent Government Systems - Bell Labs   Summer 2014
Westminster, CO   (Summer Internship)

- Worked with team of interns to develop system to identify valid cell-towers
- Developed C++ and bash programs for a MicroComputer running embedded linux
- Developed bash scripts to establish 3G GPRS cellular back-haul via a modem
- Worked on measuring and supplying power to the system

Standard and Poor's Capital IQ   Summer 2013
Englewood, CO   (Summer Internship)

- Worked with a team of interns, located in Colorado, New York, and New Jersey to select and implement an eye tracking hardware/software system for product testing
- Won a competition with five other teams of interns to develop and present multiple innovative solutions for the company
- Upgraded main testing software for the Quality Assurance Department based on conversations with management in both Colorado and India

Honors and Awards

- Dean's List - Fall 2011, Spring 2012, Fall 2012, Spring 2013, Fall 2014
- College of Engineering and Applied Science Merit Scholarship

Significant College Projects

Wireless Capacitive Charging of RC Vehicle

- Worked with team of Electrical Engineering students to design a system that was able to wirelessly charge a vehicle through capacitive charging.
- Designed control system using IR transmitters and receivers as well as capacitive detection to automatically enable and disable charging

Robot Car designed to Follow a Flashlight

- Designed navigation and control circuitry for a miniature car using an Arduino Uno
- Navigation system consisted of microcontroller that polled a grid of photo resistors through a mux in order to follow a flashlight
- Designed a speed control circuit, a transmitter circuit, and a receiver circuit with a band-pass filter to control the speed of the car based on the frequency of a transmitted square wave

Finite Impulse Response Filter

- Programmed an ARM microcontroller to send data to a DE0 FPGA
- DE0 implemented a Finite Impulse Response Filter and sent back data to ARM microcontroller