

Riley Culligan

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EDUCATION

Education: B.S. Electronics Engineering Technology with Physics minor and Mathematics minor
University: Western Washington University, Bellingham, WA
Cumulative GPA: 3.81 *Expected Graduation: June 2014*
Focus of Study: Embedded systems & communications
Additional Info: IEEE Student Secretary June 2013 – Current
Engineer in Training certified
Voted "Outstanding Senior" by EET faculty

EXPERIENCE

- Senior Project, Lucent Tag:** WWU Bellingham, WA Sept. 2013 – Current
- Independently design and implement a design for a laser tag system
 - Properly documented each phase of project including lab notebook, hardware & software design, and project description
 - Utilized ARM, ZigBee, and IR digital communication technologies.
- Formula SAE (Electric and IC Competitions):** WWU, Bellingham, WA *February 2012-July 2013*
- Engineered and manufactured a formula racing car under SAE specifications to be raced and judged
 - Designed the powertrain system for Viking 54 in 24V_{dc} and 300V_{dc} systems
 - Extensively tested and documented lithium ion battery discharge cycles
- Software Developer, Ava.ai:** Bellingham, WA July 2013 – September 2013
- Developed innovating technology in automated messaging
 - Grew the potential customer base into new verticals
- Moderator, Humans vs. Zombies:** WWU Bellingham, WA *March 2011- Current*
- Led a committee to orchestrate events of hundreds of players
 - Helped write the website <http://wwuhumansvszombies.com/>
- Technical Support Intern, ResTek:** WWU Bellingham, WA *September 2011*
- Provided technical support to WWU students in setting up their computers to the university's internet networks

SKILLS

Embedded Systems Design Skills

- Programming Languages: C, assembly, MATLAB, VHDL, PHP, SQL, and Ada using SVN and Git revision control systems
- Communication protocols: GPIO, SPI, UART, RS-232, I2C, CAN, and ZigBee
- Experience in analog-to-digital PCM encoding and digital-to-analog

Computer Program Skills

- Adept using Windows, Macintosh and Linux operating systems
- Microsoft Office Suite: Word, PowerPoint, Excel, Publisher, and OneNote
- Scientific Programs: MATLAB, Eagle, Multisim, Catia, Cygwin, PuTTY, Heidi SQL, Xilinx, Codewrite, and HI-WAVE

Tool and Kinesthetic Skills

- Extensive experience wiring, debugging, and soldering (through hole & surface mount)
- Extensive experience on oscilloscopes, digital multimeters, spectrum analyzers, and function generators
- Hand Tools: soldering iron, dremel, drill press, hand and table saws, screw guns, and screw types
- Machining experience: Mill, lathe, and PCB mill

OTHER INTERESTS: IM dodgeball, rock climbing, fishing, singing, and convention-going.