

ERIC KRAUSE

Portland OR, 97219 • (541) 337-5788
eric@sauerkrause.org • www.sauerkrause.org
ENGINEER I: ACME CO. [JOB ID: 12345]

EDUCATION

M.S., Computer Engineering <i>Portland State University, Portland Oregon – Expected Graduation: 12/2013</i>	GPA: 3.86/4.00 <i>2011-Current</i>
Post-Bac, Electrical/Computer Engineering <i>Portland State University, Portland Oregon</i>	GPA: 3.88/4.00 <i>2010-2012</i>
B.A., Environmental Studies <i>University of Oregon, Eugene Oregon</i>	GPA: 3.80/4.00 <i>2005-2009</i>

RELEVANT COURSEWORK

- Microprocessor Design
- Superscalar Processor System Architecture
- Parallel Computing Architecture
- SoC Design with FPGAs
- Embedded Systems with FPGAs
- Embedded Software Programming

TECHNICAL SKILLS

- **Proficient Languages:** Verilog, C, Assembly (ARM, z80, MIPS, PicoBlaze)
- **Familiar Languages:** C++, SystemVerilog, Python, Bash, Java (for Android Development)
- **Hardware:** RTL design and debug, digital design and SoC/embedded system design and debug with FPGAs. Experience using test equipment in a laboratory setting to verify and debug digital designs.
- **Software:** Experience with Mac/Windows/Linux. Professional experience with Xilinx Toolchain (ISE, Lab Tools, EDK, SDK). Limited experience with GNU tools (Make, GCC) and VCS (git).

EXPERIENCE

- Data Center Group Intern** – Intel Corporation – *Hillsboro, Oregon* *3/2011 - 9/2013*
- Wrote RTL and testbenches for an FPGA-based DDR3 Memory Error Injector (MEI) interposer.
 - Developed automated testing CLI utilities in Python to simplify testing of MEI on Intel server platforms.
 - Optimized existing FPGA RTL designs to improve timing and enhance features as per customer needs.
 - Tested memory error injection functionality of MEI and memory error detection on Intel server platforms.
 - Received professional award for identifying, debugging and repairing a critical functionality in a key product.
- IEEE Computer Engineering Tutor** – Portland State University – *Portland, Oregon* *9/2012 - 12/2013*
- Instructed students on a variety Computer Engineering topics, including programming and digital design.
 - Adapted teaching strategies the unique background and abilities level of each student.
- Platform Deployment Tech Volunteer** – Free Geek – *Portland, Oregon* *9/2013 - Current*
- Assembled and repaired desktops, workstations, and servers.
 - Tested and debugged hardware peripherals for reuse or recycling.
 - Administrated installation of Linux OS and other software.
- Embedded Systems Engineer** – Portland State University – *Portland, Oregon* *12/2012*
- Designed, assembled, and programmed an autonomous, color-seeking robot controlled by an FPGA SoC.
 - Implemented computer vision, environmental awareness, and behavioral control using Verilog and ASM.
 - Awarded 1st place in class competition for best term project by course professor.
- Microarchitecture Researcher** – Portland State University – *Portland, Oregon* *3/2013*
- Implemented simulation of branch predictor, branch target buffer as a term project for Comp. Architecture.
 - Designed N-way associative cache, Return Address Stack, and Fully-Associative cache structures in C++ .
 - Evaluated performance of many design iterations using instruction traces from an unknown processor.
 - Won award for performance of design by placing among the top 3 best-performing designs in the course.

HONORS

- Member and Organizer** – Etta Kappa Nu (HKN) – *IEEE Honors Society* *12/2012 - Current*
- Planed and organized events to promote HKN at Portland State University.
- Scholarship Recipient** – Ford Family Foundation – *Academic Scholarship* *8/2005 and 8/2012*
- Inducted into Ford Family Foundation Scholarship program in 2005 for leadership and academic excellence.
 - Awarded additional Graduate Scholarship in 2012 following academic success of undergraduate work.