

KURT R. SНИЕCKUS

1620 S. Michigan Ave. Apt 820, Chicago, Ill. 60616
(609) 647-2175 ksnieck@alum.wpi.edu

EDUCATION

B.S. in Electrical and Computer Engineering – May 2012
Worcester Polytechnic Institute, Worcester, MA

EXPERIENCE

Knowles Corporation, Hardware Test Engineer, *Dec. 2015–Present*

Responsible for the hardware of systems used to characterize and test hearing health microphone and receiver products in R&D and production environments. Includes writing requirements from customer specifications, designing robust and modular hardware systems to support hundreds of products, ensuring the accuracy and precision of the measurements through design, verification and qualification, and troubleshooting issues with test systems in use. The systems use National Instruments PXI, C-Series, and USB I/O, with custom fixture interface PCBs I am responsible for designing. I write LabVIEW code to interface with the measurement hardware and controllers and then work closely with software engineers to integrate it into the test executive. I also assist with R&D projects and developed a real-time customer demo system around a CompactRIO with real-time signal processing in LabVIEW FPGA.

Eventide Inc., Hardware Engineer, Audio Division, *Sept. 2012–Oct. 2015*

Lead engineer on a new mixed-signal professional audio effect product, Eventide DDL-500. Responsible for the project from concept through customer ship, including product management, component sourcing, mechanical design, electrical schematics design, PCB layout, software development, and production test. The design includes several analog audio processing circuits, high-performance audio converters, and in Verilog on the FPGA; digital signal processing modules, an external SDRAM interface and an MSP430-based soft microcontroller running embedded C. I also assisted other projects in similar areas, including front-panel mechanical design, schematic design, PCB layout, FPGA designs for multi-channel digital audio communications protocols, embedded software for Bluetooth interfaces and was responsible for the audio product production test systems.

Analog Devices Inc., IC Design Engineer Intern, *Summer 2011*

Developed a LabVIEW application to test and diagnose failures in the analog and digital portions of a MEMS accelerometer designed for vehicle safety systems.

Princeton Plasma Physics Lab., Research Assistant, *2007–2010*

Completed a summer internship project to characterize infrared cameras used on the National Spherical Torus Experiment and subsequently assisted the staff at the Lithium Tokamak Experiment with vacuum vessel assembly, experiment preparation, and diagnostic development.

Personal Projects

I use Linux in desktop, server and embedded environments extensively. In a community mesh network project I led, I helped design the network topology and contributed low-level driver code to open-source projects. I also enjoy learning about math and physics in the hope that I can gain a better understand of how engineering fits into the world.

SKILLS

Computing: C/C++, Python, LabVIEW (RT/FPGA), TestStand, Linux, Git, Perforce, Altium Designer, SolidWorks, \TeX , Emacs

Protocols: Ethernet, 802.11, TCP/UDP/IP, Bluetooth, USB, SPI, I2C, PCM/I2S, UART, JTAG

Digital: Verilog, VHDL, Xilinx & Altera FPGA, ARM, Atmel SAM & AVR, TI MSP430 and C6000

Analog: Audio circuit design, layout, and performance verification.

PCB: SMT layout, fabrication and rework.