

Peter Krogen

Objective Internship to work in the electrical engineering industry and apply my experience in the engineering field. I am interested in applying my electronics experience in a real world manufacturing environment.

Skills

- Many electrical projects, including a wireless telemetry system for armature rockets which uses an embedded GPS and 900MHz wireless link to give real time location and speed information over a distance of several miles. Mathematical simulation design and fabrication of mid-power sport model rockets
- Developed several circuits utilizing CMOS discrete logic, timers, counters, etc for LED lighting displays for use with scale model car racing. Designed and fabricated circuit boards using a photolithography process using the Eagle layout editor.
- Extensive experience with Solidworks, MATLAB, and Cadsoft Eagle, and the MPLAB IDE for PIC microprocessors; familiar with LabView, the Autodesk suite, PBASIC, Java, and C programming languages, FPGA design/synthesis/implementation, and the Freescale CodeWarrior IDE, etc.
- Obtained the rank of Eagle Scout in the Boy Scouts of America. Learned many skills including leadership, etc. Held a variety of leadership positions and performed many hours of community service.
- Automechanical skills including welding, fabrication, and rebuilding of engines, transmissions, differentials, suspensions, brakes, steering, fuel delivery, etc.
- Extensive knowledge in the THz field; worked on a commercial THz spectrometer for several years and is currently working in a THz research lab on imaging and spectrography projects.

Education

- Arcadia High School
 - GPA 3.9
- University of California Santa Barbara
 - GPA 4.0
 - Expected graduation 2012
 - Currently in the Engineering Honors Program

Experience

- Emcore, *Alhambra, California*
 - 2006-present
 - Works summers on electrical/mechanical design for a sub-GHz resolution THz spectrometer—designs many components of the THz system and remedies countless problems
 - Learned a wide variety of technical skills, how businesses operate, group skills, etc
- The Brown Group, *University of California Santa Barbara*
 - 2008-present
 - Currently employed in the Brown group at UCSB working on electrical, optical, and mechanical development/design for imaging THz systems, THz spectrometers, and characterization of materials for THz generation.

**Honors/
Activities**

- Member of IEEE electronics club (2008 - present)
- Member of Adventure Club (2008 - present)
- ROP Student of the Year (2008)

References Available upon request