

JEFFREY BECKMAN
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Education

Rose-Hulman Institute of Technology	B.S in Electrical Engineering	Feb 2011	3.1/4.0
Science and Engineering Magnet	High School	May 2007	3.2/4.0

Work Experience

- **Field Consultant Engineer** July '11 - Now
Green Hills Software, Santa Barbara CA
 - Provided technical support for embedded development tools including a JTAG probe, C/C++ compiler, breakpoint and trace debugger, and real-time operating system
 - Helped customers debug embedded programming problems on ARM, PowerPC, and x86
 - Wrote testcases in C and C++ to reproduce behaviors based on customer's descriptions, requiring an in-depth knowledge of hardware, C language, and operating system concepts
 - Communicated with customers daily to convey technical concepts in accessible language
 - Became an in-house expert on the operating system, helping answer the most difficult questions on the operating system from the salesmen and other support engineers
 - Managed 5-10 short and long term projects simultaneously
 - Updated a comprehensive changelog for certification purposes
 - Wrote several small programs in C, C++, and Python, as well as dozens technical articles to help solve common problems
- **Validation Intern** June'10-Aug'10
Freescale Semiconductor, Austin TX
 - Tested, demonstrated and documented new features on dual core automotive chip
- **Software Integration Intern** June'09-Aug'09
Northrop Grumman, El Segundo CA
 - Wrote radio abstraction layer for real-time operating system on aerial refueling test plane

Side Projects

- **Green Light Props** May '12 - Now
Santa Barbara CA greenlightprops.com
 - Founded company to design and manufacture smart LED dance props
 - Designed custom PCB with an ARM based chip using an 802.15.4 radio, accelerometer, LED driver, and battery charging through USB
 - Molded round rubber enclosure to resist high impact and diffuse light from LEDs
 - Architected firmware in C including a lightweight, low power mesh network
 - Programmed gesture recognition test program in Qt5 and OpenGL to visualize patterns
 - Configured web server, mail server, and forum for discussion on the prop's design

Programming Proficiency

- **Languages** (C, C++, Java, Python, Asm, Shell) **OS** (INTEGRITY, Contiki, TinyOS, Linux, Windows) **Arch** (ARM, PowerPC, x86, MIPS, Coldfire) **Tools** (git, svn, gdb, EAGLE, MATLAB, Maple, SPICE) **Hardware** (reverse engineering, SMT rework, high-speed digital, high-speed analog)

Other Interests

Private Pilot License	Feb 2014	130hr TT	40 hr PIC
Juggling, Dance, Ballet, Object Manipulation	Jan 2010		
Computer Security, CTFs, DEFCON	Aug 2012		
Ham Radio Technician	Jan 2007		