

Erik R. Hoeg

hoeger@rose-hulman.edu
5500 Wabash Ave, CM 1699
Terre Haute, IN 47803
(763) 229 – 4367

Education	Bachelor of Science Electrical Engineering Robotics Minor <i>Rose – Hulman Institute of Technology</i> <i>Relevant Courses:</i> Digital Systems, Digital Signal Processing, Analog Electronics Graduation Date: May 2012	GPA: 3.19
Skills	Java, C, Microchip MPLAB, Xilinx	
Experience	Oshkosh Corporation <i>Corporate Electronics Internship</i> <ul style="list-style-type: none">• Developed LabVIEW code to test CAN messaging of control modules• Tested control module amperage, voltage, and frequency limits• Designed vehicle wiring harnesses on E3 cable schematic software• Documented software using flowcharts and state diagrams for service workers to easily root cause maintenance issues• Tested a throttle pedal sensor to identify electrical characteristics and then found a replacement manufacturer General Electric <i>Consumer Industrial and Appliances Coop</i> <ul style="list-style-type: none">• Worked closely with a team of engineers to develop a new oven control• Wrote detailed test plans to identify software bugs in a repeatable fashion• Tested and identified 126 software bugs in the new oven control• Designed assembly line test to verify quality of every oven exiting the line• Conducted field tests of a new electric oven control• Developed C code for a microcontroller to automate EEPROM downloads	June 2011 to August 2011 March 2010 to August 2010
Projects	Mechatronics Project <ul style="list-style-type: none">• Designed and built a chutes and ladder game using a PIC, motors, potentiometers, buttons, IR sensors, and a 2 line LCD Display• Developed C code to accurately determine a players score, player turn, and display diagnostics Digilent Design Competition <ul style="list-style-type: none">• Used a Spartan 3 FPGA and Xilinx to create an infrared detection unit• Wrote Verilog code, state diagrams, and datapaths	Spring 2011 Spring 2009
Activities	Rose – Hulman Career Services Peer Advisor <ul style="list-style-type: none">• Helped students find and apply for jobs• Critiqued resumes, cover letters, and held mock interviews with students Lambda Chi Alpha Rush Chairman <ul style="list-style-type: none">• Organized a six week rush schedule• Set and maintained a rush budget of \$10,000 Lambda Chi Alpha Education Chairman Rose – Hulman Robotics Team	2011 to 2012 2011 2010 2010 to 2011