

Zhen Wei
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Objective: Full-time position that will utilize my hardware and software skills and experiences.

Education: **Master of Science Electrical Engineering** **GPA 3.70/4.00**
September 2014 ~ May 2016.
Rose-Hulman Institute of Technology, Terre Haute, IN
Master Thesis: Design of a Modular Educational Robotics Platform

Bachelor of Science Electrical Engineering with minors in Computer Science and Robotics, **GPA 3.51/4.00**
August 2010 ~ May 2014.
Rose-Hulman Institute of Technology, Terre Haute, IN

Skills:

Electrical Engineering

- Familiar with circuit design and PCB layout design (Eagle PCB and Cadence OrCAD)
- Familiar with programming in C for microcontrollers, program 32-bit Linux Embedded Systems and embedded system design
- Familiar with serial communication, UART, SPI, I2C, and so on.
- Familiar with power system, AC/DC converter, DC/DC converter (Buck, Boost, Buck-Boost)
- Familiar with programming with PLCs and able to do control system design
- Able to do analog system design, do analog testing, and knowledge in analog IC design.
- Able to program in Verilog and basic digital system design
- Able to do basic signal works and communication system design
- Able to program in Matlab (simulation, Control, GUI), program in LabView, knowledge in brain-computer interface(BCI).

Computer Sciences

- Programming skills in the following languages: C, C++, Python, Java, Basic, Pascal, Perl
- Familiar with Linux CLI and shell scripting
- Basic knowledge in computer organization and operating systems
- Web development by utilizing HTML5 (HTML, JavaScript, CSS), Php, Mysql, Hadoop, node.js, and Angular JS
- Android and iOS App development

Others

- Able to speak in fluent Chinese, and proficient English
- Able to use 3D CAD tools (Solidwork, Onsharp)

Experience: **Ivani LLC (NDA)** Dardenne Praire, MO
Electrical/Software Engineer June, 2015 ~ Present

- Circuits design and PCB layout design for Nway IoT system, Ivani Net DC Lighting System, and other products and platforms
 - AC/DC convertor and DC/DC buck/boost convertor, battery charging and power monitoring circuits design
 - AC light dimming and DC LED driver circuit design, LED thermal dissipation design
 - Capacity touch pad control circuit design
- Designed a modular demo and testing platform for Network Presence in BLE and Zigbee
- Firmware Coding for ARM based SoC chip (BLE, Zigbee), MSP430, ATmega328
- Design the hardware part for smart faceplate
 - Designed an untouched AC current sensor
 - Named on a pending patent

Rose-Hulman Ventures Terre Haute, IN
Engineering Intern April, 2013 ~ March, 2014

- Designed the embedded system for nuclear source housing for IME
 - Programed the C code for microcontroller, designed the circuits and PCB layout
- Designed the control system for Kissell Soil Sampler Project (NDA)
- Built the PLC control system for CLM Pallets Recycling Project
 - Programed the touchscreen control GUI and PLC system

Projects: **Smart Home Design** June, 2014 ~ September, 2014

- Built 2.4GHz RF wireless communication home network
- Designed web base GUI with databases through 32-bit Linux Embedded system
- Designed thermostat, socket, and switch circuits, and programmed the devices

Honors: Senior Design Project (Spray Rig Location Projects) acquired Appreciation Letter from Client (Solar Turbines)

Activities: Eta Kappa Nu (Electrical and Computer Engineering honorary), Member 2013
EcoCAR, Member, 2013