

# Joon Yi, Koh

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## Education

### **Master of Science in Electrical Engineering, University of Pennsylvania**

3.51/4.00, Sept.2013-May.2015

Courses: The physics of solid state device, Analog/Digital Integrated Circuit, Electromagnetics, Embedded System Programming, Real time Embedded System, Computer Organization.

### **Bachelor of Engineering (Electrical) University of Malaya, Malaysia**

3.75/4.00, July.2006-August.2010

## Research and Working Experiences

### **New Product Engineer – Texas Instrument**

**Jan.2011-Jan.2012**

- Design and develop analog/mixed signal Automatic Testing Equipment solution
- Write C/C++ code for Automatic Testing Equipment
- Support production team for IC mass manufacturing

### **Access Network Engineer – Huawei Technology**

**Jan.2012-Aug.2013**

- Huawei Certified Datacom Associate (HCDA)
- Deliver project and provide post-sales technical support for mobile backhaul and access network (Ethernet, TCP/IP, UDP, GPON, MxU, IPDSLAM, PRI/BRI)
- Command line and C/C++ code debugging

### **Research Assistant – Wearable Gunshot Detection with Prof. Loeffler**

**July.2014 – Dec. 2014**

- Design PCB which utilize Arduino, Atmega328P, ADXL345, microSD and RF module (nRF240LE1) to collect and store the real time data
- Write embedded C programming for accelerometer, RF module and microcontroller
- Debug on UART, SPI, ISR
- Write Matlab code for real time data display

### **Research Assistant – Human Body Communication with Prof. Spiegel**

**Jan.2014 – May 2015**

- Explore various modulation methods, namely FSK, PSK, PPM, PCM, for human body communication
- Design PCB board with Cadence Allegro

### **Teaching Assistant – ESE570 Digital Integrated Circuit/VLSI with Prof. Laker**

**Jan.2015 – May 2015**

- Assist student on Cadence Virtuoso to draw schematics, layout and verilog

## Technical Skills

**Hardware:** Mbed, Atmel, Arduino, PIC Microcontroller, Teradyne/Eagle, Automatic Testing Machine, Wafer Probe

**Programming:** Assembly Language, embedded C/C++, Verilog, Java, Python

**Software:** Cadence Virtuoso, Allegro, Capture CIS, AutoCad, Matlab, Atmel Studio, Eagle, MPLAB, Microsoft Visual C++, JMP, Eclipse, Processing, gcc

**Language:** English, Chinese, Malay