# YUNXIA WANG (Angelina)

Phone: 6073799117 126 Westbourne Ln Apt 12 Email: yw747@cornell.edu 14850

# OBJECTIVE: To begin as a product development engineer, with opportunity to enhance leadership.

### **EDUCATION**

Cornell University, Ithaca, NY, USA

Aug. 2015 - Exp. May. 2016

Master of Engineering in Electrical & Computer Engineering - GPA 3.50/4

Southeast University, Nanjing, Jiangsu, China

Sep. 2011 - Jun. 2015

Bachelor of Engineering in Information Science & Engineering - GPA 87.77/100, 3.60/4

Washington State University, Pullman, WA, USA

Aug. 2014 - Dec. 2014

Exchange student in Electrical Engineering - GPA 3.70/4

#### RESEARCH EXPERIENCE

Cornell University, Ithaca, NY, USA

#### Handwritten Mathematical Expression Recognition and Calculation

Nov. 2015 - Dec. 2015

- ◆ Designed a C++ application recognizing math expression written in one row based on KNN algorithm.
- ◆ Implemented Seam Carving and directly scaling algorithm to process bitmap images and training data.
- ◆ Accelerated recognizing runtime using High-Level Synthesis (Vivado) and FPGA (Zedboard).

Clear Microwave, Inc, PA, USA

#### **Microwave Components Part Time Developer**

Jul. 2013 - Jan. 2015

Designed, simulated, and tested the following projects with AWR, ADS, HFSS, and network analyzer:

# A New Ka-band (26.5G - 40G) 180° Hybrid Coupler

• Published a paper as the first author.

Apr. 2015

- ✓ A new Ka-band 180° hybrid coupler, Wireless and Microwave Technology Conference (WAMICON), 2015 IEEE 16th Annual
- Consists of a Wilkinson power splitter and a 180° differential phase shifter which composed of a 5-section  $\lambda/4$  short circuit stub spacing at approximately  $\lambda/4$  wavelength and a 50 Ohm reference transmission line.

#### A Novel Broadband (6G -12G) 180° Hybrid

◆ Consists of three-stage coupler lines with 90° phase shifting and a 90° phase shifter composed of a 3-section short circuit stub.

Southeast University, Nanjing, Jiangsu, China

### 433MHz Super-regenerative Wireless Receiver Design Based on PCB Antenna and PCB Resonant Inductor

◆ Designed a planar antenna with receiving range of 110m within 2\*3cm-sized PCB.

Mar. 2015 - Jun. 2015

- ◆ Designed planar resonant inductors within 1\*1cm-sized PCB and flexible PCB (FPCB).
- ◆ Developed minimized and wearable wireless receivers for the microelectronic neutral bridge system.
- Awarded excellent senior design thesis in the university.

### **Bicycle Searching Device**

Dec. 2012 - May 2013

- ◆ Team leader in a two-people group.
- Built a pair of portable and marketable searching devices consisting of a transmitter and a receiver.
- ◆ Designed signal generating and processing circuits implemented with 315MHz modules.

# **VHDL Projects**

◆ A virtual Parking Lot Control System; A Parallel Output Controller; A Microprogrammed Central Processing Unit referring computer organization and architecture.

## **SKILLS**

- ✓ Engineering Tools: ADS, AWR, HFSS, Network Analyzer, Altium Designer, Cadence, Quartus, Multisim, AutoCAD
- ✓ Programming Languages: JAVA, C++, Android, PHP, MYSQL, Javascript, HTML, CSS, Matlab, VHDL, Assembly

## **HONORS AND ACTIVITIES**

- ◆ The State Scholarship Fund By China Scholarship Council; Mitsubishi Electric Scholarship; Voluntary Service Scholarship and Culture & Sports Activity Scholarship
- ◆ Volunteered as National Olympic Committee (NOC) Assistant in the 2nd Asian Youth Games
- ◆ Worked as a liaison at Southeast University Model United Nations (MUN) Association and International Students Association
- ◆ Interests: Piano, Dancing, Swimming, Basketball, League of Legends