Yiqin Wang

*6585 El Colegio Rd *Isla Vista, CA 93117*Cell Phone: (805) 886-4683 *E-mail: yiqinwang926@gmail.com

Personal Information

Name: Yiqin Wang Gender: Male Date of Birth: Jul.24,1995

Education background

B.S., Electrical Engineering. University of California, Santa Barbara, June 2017
GPA: 3.45
Received 5 times Dean's Honors (ENGR)

M.S., Electrical Engineering. University of California, Los Angeles, expected June 2019

Relevant course work:

- Circuit design and testing
- Semiconductor
- Signal Analysis
- Digital Signal Processing
- VLSI principle
- Programming
- Fields and Waves
- Probability and Statistics
- Software/Hardware interference
- Digital Design Principles
- Circuits and Electronics
- Logic designs
- EE senior project

Qualifications

- Three years plus of lab and project-related work of circuit analyzing, circuit testing and logic design, mostly focus on signal processing of both analog and digital.
- Interests on VLSI and mixed-signal processing now.
- Developed skills including: measuring data, coding control circuits, logic gates design and debugging, software/hardware interface, EDA design, I2C and I2S communication.
- Software/Hardware competencies: Arduino, FPGA, C, Embedded C, C++, Matlab, Verilog, Xlinx SDK, Vivado, Quartus II, Microsoft Office, Hspice, Sue, Max, Cosmospice, ModelSim, LPCXpresso.
- Fluent communication in English and Chinese (familiarity with Japanese, self-learnt Spanish).

PROJECTS

EE Senior Capstone Project with SONOS Inc. September 2016 – Now

- Lead the group of multi-discipline students to design how the Digital Signal Processing block will reduce the noise when recording the voice file and filter the actual needed voice command.

Yiqin Wang

*6585 El Colegio Rd *Isla Vista, CA 93117*Cell Phone: (805) 886-4683 *E-mail: yiqinwang926@gmail.com

- Researched about how to reduce the echo created from the speaker and microphone.
- Designed the circuit to rectify the incoming signal and amplify it with the microprocessor LPC 4088.
- Cooperated highly with Computer Engineering group and Mechanical Engineering group to figure out how to implement the PCB board and how to layout it inside of prototype.

CAD Design **January 2017 – March 2017**

- Designed a system design automation based on the master and slave bridge.

Tetris Project **January 2017 – March 2017**

- Designed the classic Tetris game based on C.
- Used the LPCXpresso environment to understand the I2C communication in the project to print the Tetris to LCD screen.

Chromatic Tuner **September 2016 – December 2016**

- Designed a Chromatic Tuner on Nexys4 DDR development board from Digilent.
- Optimized the code of interrupt to accurately get the user input and optimized the FFT function to precisely detect the corresponding frequency.

Communication system using acoustic link **April 2016 – June 2016**

- Designed the low filter which could cut certain frequency or above in order to eliminate noise.
- Designed the transmittal system and tested the whole system with a pilot signal with its matched component.
- Optimized the speed of code for better user experience.

Acoustic phased array **April 2016 – June 2016**

- Designed the delay stage and amplifier stage to drive a certain numbers of speaker combination rings and make the sound to focus on certain location.
- Wrote the Matlab simulation code to locate the focus points of speaker ring and graph the corresponding sound intensity.
- Constructed the speaker rings on a stable board on minimize the noise.

FPGA logic design **April 2016 – June 2016**

- Designed logic structure of a fully functionaladder and thunderbird tail light.
- Implemented the design using Verilog and downloaded the code to FPGA to test the correctness.
- Improved the stability and performance of the tail light by considering all the possible combination of input, including the false trigger or false input.
- Researched about how the hardware design based on software code.

Yiqin Wang

*6585 El Colegio Rd *Isla Vista, CA 93117*Cell Phone: (805) 886-4683 *E-mail: yiqinwang926@gmail.com

Extracurricular Activities

Internship in Tonghui Electronic Co. August 2016 – September 2016

- Participated in a product design group and understand the difference between a commercial design and a campus research-project based design.
- Helped their senior engineers to examine the circuit and record the data. Provide possible solutions based on observation and testing results.
- Understood how to change the design based on the customer's demand.

Special Skills

Evaluated leadership and participation in laboratory

- Assisted colleagues in designing, implementing and presenting projects in labs.
- Co-organized and –facilitated teaching assistant in debugging and testing circuits.
- Contributed to solving problems with others and sharing ideas.

Advanced design abilities and self-correct skills

- Used Arduino to model particular circuits and monitor the signal when hand checking is highly impossible.
- Checked the project constantly and try to fully understand and fix the problems by my own at first time.
- Presented various solutions for signal problem and comparing to seek the best one.

Illustrated presentations skills and communication skills

- Presented the essence of interviews with professors clearly.
- Performed fluent speeches about science research in front of crowd.

Organized assembling abilities

- Built most circuit projects in laboratory by hands and tolls.
- Packaged different electrical elements together precisely and swiftly.
- Redesigned the blueprint when mistakes occur.

Hobbies

- Reading medieval literature and history. Enjoying to re-examine the thesis and coming up some new ideas about the readings.
- Playing and listening to multiple types of music with multiple culture and social background. Specialized in traditional Chinese music instrument Erhu. Enjoying to use my signal processing knowledge to make some interesting music research.
- Enjoyed working out and exercise, especially long-distance running and boxing. Being very proud to lose over thirty pounds and keep it there.