# YICHENG XIONG

### **Electric & Computer Engineering**

@ xiongyi@oregonstate.edu

**◊** Xuchang, China

in linkedin.com/in/roberto-noel-038603130/

• https://github.com/cyberXiong/ECE

# **EDUCATION**

## **Oregon State University**

### **Bachelors in Electric & Computer Engineering**

Mar 2018 - Aug 2022

♥ Corvallis, US

- Electric & Computer Engineering GPA: 3.2/4.0
- Full year of study at Oregon State University, College of Engineering

## **EXPERIENCE**

## Soft Engineer

#### ECE272 Lab

Mar 2020 - June 2020

♥ Corvallis, US

- Summarize the schematic and draw the circuit diagram in Modelsim.
- Use SystemVerilog to build the operating environment.

#### **Elctrical Engineer**

#### ECE 341 Lab

**#** Jun 2021 - Mar 2021

- ♥ Corvallis, US
- Soldering the Arduino Nano circuit board, and successfully converted the output of the 5V circuit and the 3.3V circuit.
- Use Arduino to convert the input and output voltages into text form, and plot the voltage changes in MATLAB.

#### Soft Engineer

### ENGR202 Lab

m June 2020 - Aug 2020

- ♥ Corvallis, US
- Calculate the current in the circuit. Use LTspice for circuit drawing.
- Use MATLAB for simulation drawing, and statistical comparison of the results.

## **LANGUAGES**

English Mandarin



# **TECHNICAL SKILLS**

C C++

**SystemVerilog** 

LTspice

MATLAB

# **PROJECTS**

# Passive Filter Design Using MATLAB Simscape

- Use the frequency filter to filter a specific wavelength based on a specific frequency and assign it to each speaker separately.
- Three different filters can be used to create different sounds and frequencies including aggressive heavy bass, light smooth sound, or other various. frequency music.

#### NES controller, 3/8/2020

 Specifically calls on a counter to digitally count up and display the current number on a seven segment display.

#### **JD** power supply, 2/8/2021

- Design a virtual circuit and debug it in Arduino.
- Restore the design in the actual circuit to ensure that the voltage can be stably converted.

#### Accelerated Project, 3/19/2021

Use Arduino Nano to build an FFT, it will sample the audio signal from the signal source and display the detected notes on 8 different LEDs. The range of the note is from mid range C (261.626 Hz) to treble C (523.251 Hz). Any unamplified instrument can be used, a test sequence of notes can be played using a mobile phone, or the included LM386 can be connected to the Arduino to provide a test tone.

# Non- Contact Temperature Scanner, 5/29/2021

 A non-contact temperature scanner with Arduino Uno as the core. Can be charged, OLED display, buzzer alert.

# **SOFT SKILLS**

- Remote working experience, able to use remote sharing software for work.
- Willing to spend time on self-learning related skills.