

Vincent Li

(949) 351-0560 | vincentli@asu.edu | Tempe, AZ | Irvine, CA

EDUCATION

Bachelor of Science in Computer Systems Engineering

December 2021

- Barrett, the Honors College at Arizona State University

GPA: 3.28

SKILLS

- C/C++, Java, JavaScript, Python, SQL, Bash, MATLAB, MIPS, x86, Linux, Git, Jupyter Notebook, Android app development, web app development, relational database management
- Embedded systems, Xilinx Vivado, Verilog, LTSpice, Autodesk Eagle, computer networks

PROFESSIONAL EXPERIENCE

Algorithm Developer | ASU School of Arts, Media, and Engineering | Tempe, AZ

August 2020 - April 2021

- Worked with the Lifelog Project at ASU, which researches the use of machine learning on wearable data to verify the effectiveness of medical studies and interventions
- As part of my honors thesis project (ASU), developed and deployed a web application called SigNorm (web-app.li-vincent.com) for the purpose of conveniently preprocessing time-series data in a code-free user interface
- Devised a preprocessing method for a human activity recognition dataset which improved prediction accuracy on a 1D convolutional neural network

Student Software Engineer | ASU Research Computing | Tempe, AZ

May 2019 - August 2019

- Gained experience with using Linux, Bash scripts, C++, Python, and Slurm Workload Manager to interact with the high-performance computing cluster
- Presented a poster ("Porting CPU Agent-Based Modelling Applications to GPU") and participated in the student program at PEARC19 in Chicago, IL
- Presented a lecture to a graduate-level anthropology research class on how to implement agent-based modeling on the ASU Agave research computing cluster

ACADEMIC PROJECTS

ASU | Embedded systems project

November 2020 - December 2020

- Created a circuit using the FRDM-KL46Z development board, with an ARM Cortex-M0+ processor, to control the speed of a motor based on an analog input from a potentiometer
- Used the PIT module to trigger timer interrupts, the ADC module to read the analog voltage, and the PWM module to change the speed of the motor

ASU | Network application

October 2020 - November 2020

- Programmed a network application using Java and its socket programming libraries
- Implemented both client-server and peer-to-peer networks with UDP socket communication

ASU | Audio amplifier circuit

April 2020 - May 2020

- Designed a multistage audio amplifier circuit with MOSFETs
- Complied with the design requirements such as minimum voltage gain and bandwidth
- Wrote a report which includes schematics, component values, calculations, and output waveforms

ASU | FPGA programming project

January 2019 - May 2019

- Used Icarus Verilog and Xilinx Vivado to implement circuits on FPGA

ACTIVITIES

Race Director (2020-2021) / Board Member | Cycling Club at ASU | Tempe, AZ

August 2017 - Present

- Treasurer 2019-2020
- Safety Officer 2018-2019