


## EDUCATION

- **1ST-2ND YEAR BS Electrical Engineering** – University of California Santa Barbara – 2019-2021
- **3RD-4TH YEAR BS Electrical Engineering** – University of California Los Angeles – 2021-2023


Relevant modules & coursework:

- Hardware and Circuits
    - \* Circuitry
      - Analog Circuit Design
      - Digital Circuit Design
      - Arduino with C++
  - Signal Processing
    - \* Learned basics to Signal Processing and applied knowledge with Python.
      - Applied Fourier Transform to different signals to analyze them.
      - FIR Filters
      - Shannon's theories.
  - Computer Science
    - \* Programming guidelines and basics
    - \* Modern tools and software developments in C++
    - \* Signal processing with Python
  - Project
    - \* Retro Gaming Console – **Arduino Gaming Console** ()
      - Arduino Leonardo coded with C++
      - Altera MAX7000 Series IC with verilog
      - PCB designed with PADS
- **A-Level** (High School) – (Shenzhen, China) Nanshan Chinese International College – 2017-2019
    - Further Math, Math, Physics and Chemistry – A\*/A /A\*/A /

## SKILLS

- Languages: C++, C#, Python, Verilog,  $\LaTeX$ 
  - Coding experience with C++ and Python
  - Game Development with C# in Unity
  - This document is written in  $\LaTeX$
- Circuit Board Designs
  - Familiar with developing PCBs with PADS
  - Coding Verilog in Quartus
- Web development
  - Worked with web developers in Tencent.
  - Have some experience creating web server.
- Game development
  - Building and designing games with Unity coding in C#.

## SOME PERSONAL PROJECTS

- **Arduino Debugger** () : Single Step Arduino Debugging made cheap and affordable – 2018.
  - PC and Arduino communicate through serial communication
  - PC side runs library identical to Arduino but sends an command instead of executing
  - Arduino is programmed to translate the command into corresponding code and execute it

- **Arduino Remote Display** (🔗) : Remotely update display with MQTT protocol – Oct 2019.
  - Translates an image file with C# desktop application and sent using MQTT
  - Arduino receives and output the images to the epaper display
  - A test for adding wireless step by step debug function to Arduino Debugger
- **GameBoy-Pi** (🔗) : Gameboy built with Arduino – 2018
  - My PCB design was manufactured by [JLCPCB](#)
  - Raspberry Pi 3B running [Retro Pi](#)
- **Arduino Calculator** (🔗) : Arduino Calculator(Pi Portable) – 2017
  - Portable Linux CLI.
- **LED Emoji Goggle** (🔗) : Inspired by Wrench (Watch Dogs 2) – 2017-2018
  - LED Matrix with CMOS 164 shift register IC
  - Remotely controlled with HC-05 bluetooth module and Arduino
  - [Video Demonstration at](#) 📺
- **This CV** (🔗) – 2020 todate
  - $\text{\LaTeX}$  source code to this cv
- **AVG Game Creator** (🔗)
  - Reads text file and phrase them in real time to create desired effect
- Others:
  - [Game Project Archive](#) (🔗)
  - [Hardware Project Archive](#) (🔗)

## OTHER INTERESTS

- Playing Piano
- Video Editing
- Gaming