Jonathan Lin

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EDUCATION

Santa Clara University (Santa Clara, CA) **Current**
M.S. Electrical Engineering (GPA: 3.8)

Santa Clara University (Santa Clara, CA) **2024**
B.S. Electrical and Computer Engineering (GPA: 3.7)

SKILLS

Programming Languages:	C/C++, Verilog
Familiar Technologies:	LTSpice, STM32Cube, MATLAB, KiCAD, FreeRTOS
Technical Skills:	Soldering, Circuit Analysis, Electrical Measurements, PCB Layout

RELEVANT COURSEWORK

Upper Division Classes:	Electronics, Computer Architecture, DSP, Real-time Embedded Systems
Elective Classes:	Power Electronics, Mechatronics, Digital IC Design

PROJECTS

Door Security System **2024**
– Final project for graduate Embedded Systems class programmed with C on a STM32 Discovery Board
– Utilizes FreeRTOS and interfaces with several peripherals in different tasks

Underwater Servo Loop Prototype **2023 - 2024**
– Senior Capstone Project in collaboration with the Climate Foundation
– Prototype for transmission of depth and temperature data from underwater kelp platform to surface
– Coded frequency shift keying modulation and demodulation as well as control loop logic

Whack-A-Mole Bot **2024**
– Final project for Mechatronics class utilizing an Arduino Mega 2560
– Programmed PID line following, color sensing, and mole hitting capabilities
– Achieved 3rd place out of 14 teams in number of moles hit in 1 minute

Remote-Controlled Music Player **2023**
– Final project for Embedded Systems class programmed with C on a STM32 Discovery Board
– Decodes and plays a RAW music file from a USB drive
– Controlled through a generic IR remote

CLUBS

Tau Beta Pi (Member) **2023 - 2024**
– Tutored students for "Intro to Logic Design" and "Circuits I"

Engineers Without Borders (Member) **2022**
– Worked on germination chamber for Valley Verde, a non-profit community garden
– Designed and built chamber sensor/heating circuit, controlled by Arduino UNO R3