

Alina Suon

alinasuon@gmail.com | (562) 320 – 3609 | Lakewood, CA 90713
<https://github.com/alinasuon23> | <https://www.linkedin.com/in/alina-suon/>

Education

California State University, Long Beach

Major: Computer Engineering

Long Beach, CA

Graduation Date: May 2020

Technical Skills

Programming: Python, C++, Java, Verilog, MATLAB, Assembly (Arm, 8051), VHDL

Tools: Development Tools, IDEs and EDA Tools – Xilinx ISE Design Suite, Keil μ Vision, Vivado, Altium, Solidworks, Microsoft VisualStudio, Anaconda, LTSpice, Dev C++, Eclipse

Other Skills and Emphasis – Embedded Systems, Microcontroller, FPGA Development, Verilog / VHDL Behavioral & Structural Modeling, PCB Design, Schematic Entry and Physical Layout, SMD and Traditional Soldering, Digital Circuitry

Project Experience

PickIt – Autonomous Picker Upper

January – November 2019

Project Member

- Systematic design and development of an automation that would facilitate the collection of water bottles
- Implemented TensorFlow object detection API enabling camera module to recognize and track object
- Enriched user experience by incorporating Bluetooth SPP module to enable remote control via android app
- Defined servomotors' position feedback to adjust the motor action depending on commanded parameters

Smart Bartender

October 2018

Project Member

- Coded a dictionary key to store beverage name and ingredients for its application in the JSON file pump config
- Enabled Raspberry Pi I2C bus and ran an installation script to setup OLED screen for user interface
- Soldered electrical components to circuit board and constructed the smart unit from raw materials
- Conserved the project budget by 24 percent from efficient design planning and groundwork

PONG Game Simulation

September 2018

Project Lead

- Generated a VGA module to set monitor parameters and send hsync and vsync directly to monitor console
- Coded 3 pixel-generation mapped scheme to create fixed objects and output RGB signals to designated pins
- Calculated the timing of VGA synchronization signals to establish the pixel rate, resolution, and refresh rate
- Successfully driven a VGA monitor that displays an interactive Pong game onto CRT monitor using an FPGA

Autonomous Line Following Vehicle

April 2018

Project Member

- Prototyped a robot with simple analog feedback control entirely comprised from analog components
- Drafted 3+ LTSpice models of the circuit to observe the waveform simulation and verify its functionality
- Converted analog voltage into a PWM signal to drive the MOSFET motors using a comparator
- Produced an original PCB design and schematic in Altium CircuitMaker

Work Experience

Victor Real Estate – Long Beach, CA

January 2021

Real Estate Assistance / Courier

- Managed substantial quantities of legal documents using DocuSign and responded to office calls and emails
- Managed the client database and scheduled follow-ups and meetings
- Secured delivery and pick-up of legal documents timely to desired location
- Post up marketing boxes, lock boxes and brochures at different properties