Christopher H. Simaan

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EDUCATION

University of California, Los Angeles   June 2023 – May 2025
B.S. - Computer Science and Engineering

Cuyamaca College   June 2021 – Mar 2023
A.S. - University Studies - Science and Mathematics

EXPERIENCE

Software Developer   Jun 2023 – Present
Telaeris
San Diego, California

- Designed a Bluetooth-enabled PCB to interface with a dual-frequency RFID module, facilitating versatile contactless badge verification
- Developed a PCB that extended RFID reader range and achieved an 88% reduction in badge read time.
- Developed a custom PCB with Zigbee communication, integrating with sensors for efficient data transfer, and created durable housing for environmental resilience
- Implemented Bluetooth vibration sensors for real-time motor performance monitoring and notifications, collaborating with cross-functional teams to resolve software challenges

Software Developer   Jan 2019 – Mar 2019
Alpha Technics
Oceanside, California

- Developed Alexa interface integration to wireless t-Pod thermometers.
- Collaborated with technical directors on completion of project components.
- Created presentations on topics discussing the implementation and specifications of new products.

Technical Support   Aug 2015 – June 2017
Holy Trinity School
El Cajon, California

- Maintained and restored preexisting computer systems, desktops, and peripherals.
- Acquired requests from administration to optimize classrooms preferences based on personal teaching styles
- Achieved a 10% reduction in technology costs while upgrading classroom experiences with new technologies
- Reduced average issue resolution time by 50%, ensuring minimal disruption to teaching activities.

PROJECTS

Structured
A macOS application written in Java using the Processing library. Creates generative pieces of mathematical artwork. Used by students inside of the MacLab.

Car Connect
A personal project is written in C++. Creates a seamless interface from phone to car. Uses car's CAN-Bus to read and send messages to car's ECU. Additionally allows remote start by using relay connected to ignition switch.

Remote PC Switch
Custom PCIe Card that remotely turns on and off PC by being put in series with case and motherboard Front IO connectors. Uses ESPHome and Home Assistant for remote capabilities.

Alarm Keypad
Custom alarm keypad that interfaces with Home Assistant. Has a 4x4 key switch matrix, Fingerprint Sensor and NFC Reader. Powered by an ESP-32 S3 with an OLED Display Module