Christian Jay Bauzon

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EDUCATION

California Polytechnic State University   **San Luis Obispo, CA**
B.S. in Electrical Engineering   (Graduated Dec. 2022)
Engineering Coursework

- Electronics Manufacturing
- Fundamentals of Comp. Sci (Python)
- Electric Circuit Analysis I, II, II
- Power Electronics I
- Data Structures (Python)
- Microcontroller-Based Systems Design
- Digital Design

SKILLS

Programs/Languages: Orcad PSpice, Xilinx Vivado, Python, Embedded-C, HTML, CSS, JavaScript, MySql, SystemVerilog, Git, Visual Studio, Cadence CAD

Tools: Oscilloscopes, Multimeters, Power supplies (DC/AC), Digital Logic Analyzer, Soldering Iron, Screwdrivers, Drills, STM32 Microcontroller, Basys 3 FPGA Board

Operating Systems: Mac OS, Windows, Linux

PROJECTS

Digital Lockbox: Microcontroller-Based Systems Design Project (Embedded Software)
Technology used: Embedded-C, STM32, GPIO, Github

- Developed software to interface a 16x2 LCD (NHD-0216HZ-FSW-FBW-33V3C) with a 4x4 keypad
- Implemented using GPIO pins on a Nucleo-L476RG that uses an STM32L476RG microcontroller
- Programmed in C and designed using a finite state machine
- Debugged and troubleshoot software by looking at register values and timing diagrams

Waveform Generator: Microcontroller-Based Systems Design Project (Embedded Software)
Technology used: Embedded-C, STM32, SPI, GPIO, timers, interrupts, Github

- Used a 12-bit DAC (MCP4921) to output voltage waveforms with variable frequencies
  - Sine, Triangle, Ramp, Square Waves
- Interfaced with the DAC using a 4x4 matrix keypad
  - Keypad changes the waveform type, frequency (100Hz – 500Hz), and duty cycle (for the square wave
- Utilized timers and interrupts

OTHER WORK EXPERIENCE

Demonstrated accurate reporting and documentation, strong communication skills, and excellent teamwork in the following employments:

Jabil   **Fremont, CA**   **Aug. 2019**
Quality Control Associate

Apical Instruments Inc.   **Redwood City, CA**   **June 2018-Sept. 2018**
Engineering Intern