

Christopher Sponza

christopher.sponza@colorado.edu - (631) 740-4729 - Boulder, CO

<https://www.linkedin.com/in/christopher-sponza/> - <https://csponza.github.io/>

Education

University of Colorado Boulder

(2021-Spring 2025)

- Major: Electrical and Computer Engineering
- GPA: 3.691
- Relevant Coursework
 - Embedded Software Engineering
 - Practical PCB Manufacturing
 - Electronics for Wireless Systems
- Minor: Computer Science
 - Real Time Operating Systems
 - Data Structures
 - Computer Organization

Experience

CU Boulder Capstone Project

(Aug 2024-Apr 2025)

(Sinclair Digital PoE Air Monitoring/Filtration)

- Responsible for embedded software development and overall system architecture of an air monitoring and purification system for Sinclair Digital's ethernet powered hotel
- Leading Engineering on integration of various environmental sensors with Arduino to determine Air Quality Index (AQI) and detect errors in system operation.
- Responsible for design of PCB design and microcontroller integration for the product

BI Incorporated

(May 2024-August 2024)

- Successfully integrated Bosch BME688 VOC sensor with Nordic MCU via I2C for use in a pocket sized breathalyzer with regression model created with Bosch AI studio (C Programming/Nordic SDK in VScode)
- Implemented data transfer from MCU to mobile app via BLE
- Designed cloud based data collection system for GPS monitoring station using ESP32 (C++) and a Node-RED server on a Raspberry PI with data parsed by a Python script and brokered by MQTT enabling qualitative analysis of GPS data during various levels of solar activity.

US Navy

(2014-2020)

- Nuclear Machinist Mate aboard USS Toledo (SSN 769) 2016-2020
- Served as Machinery Division Leading Petty Officer 2019-20 responsible for the successful completion of rigorous pre-shipyard maintenance and testing period
- Operated as Engine Room Supervisor 2018-2020 during missions vital to national security
- Held Secret Security Clearance from 2014-2020

Technical Skills

- Programming Languages
 - C / C++, Python, HTML, JS
 - Assembly (x86, ARM)
- PCB Design (Altium)
- Oscilloscope operation
- SIMatrix (Circuit Simulation)
- Testing/Debugging of Electrical Systems and Code
- Creation of Technical Manuals/Procedures
- Version control of code and management via Github
- Soldering/Welding

Extracurriculars

BSA Eagle Scout • Avid Skier/Climber/Backpacker(Appalachian Trail 2021) • Ultramarathonist