

Sergio Sanchez-Alvares

Embedded Software | Full Stack Development

surgosan@gmail.com | sanchezalvarez.dev | github.com/surgosan
linkedin.com/in/sergio-sanchez-alvares-36a97614a/

Education

Kennesaw State University

Bachelor of Science in Computer Science

August 2023 to Present
Dean's List

Dalton State College

Associates of Science in Computer Science

August 2020 to May 2023

Relevant Experience

Full Stack Developer Intern

May 2024 to Nov 2024

Peaches and Cream Foundation

- Revamp the organization website in order to update its UI
- Develop a new full stack web application to host the organization's message board.
- Work closely with other departments such as psychology & outreach to ensure that the website contains necessary information and functions for users.

Full Stack Development • HTML • CSS • JavaScript • VueJS • NodeJS • MySQL

Front-End Developer & Embedded Software Engineer

August 2023 to Present

Autonomous Underwater Vehicle Team at Kennesaw State University

- Created the organizations website from scratch.
- Work with electrical team to develop PCBs that will communicate on the vehicle.
- Implement communication protocols such as I2C and CAN to control modules.
- Solder components together and wire them to ensure solid connectivity between modules.
- Work with microcontrollers to program and correctly send data to the software team.
- Teach new members how to improve their skills (Altium, circuits, MCUs, soldering).

Front-End Development • Embedded Software • Soldering • Altium Designer • Arduino IDE

Featured Projects [Out of 11 visible on portfolio]

ESP32 Automated Water Pump V2

June 2024 to July 2024

- Created a microcontroller-based (ESP32 by Expressif) water pump system for a water fountain.
- Designed the schematics and configured components such as step-down voltage regulators and MOSFETs.
- Designed and manufactured a PCB to host the buck converter and interface with the ESP32 and water pump.
- Placed completed product in a dedicated housing and controlled from web app hosted on the ESP32 to control the water pump. The water pump also automatically toggles based on time.

Embedded Software • Soldering • Altium Designer • Arduino IDE • Circuits

Personal Portfolio

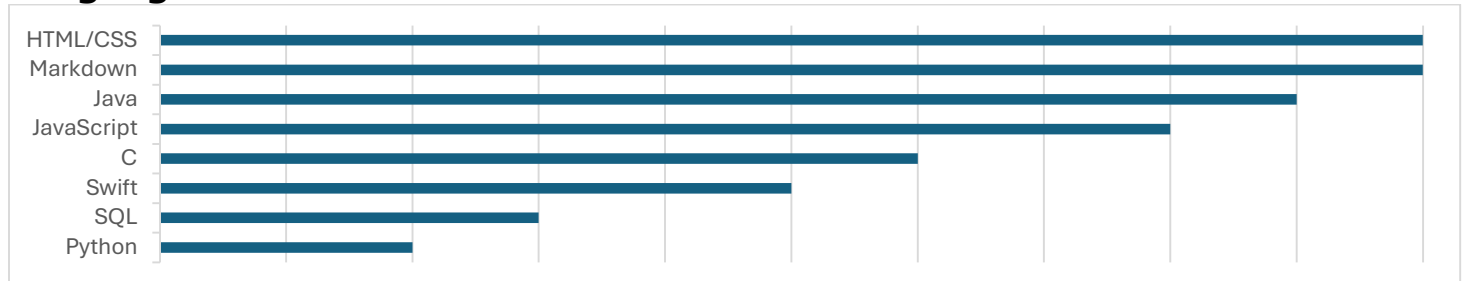
2021 to Present

- Created a full stack web application to display my projects, information, and have website metrics to measure traffic and messages.
- This web application was remade from scratch to replace the original.

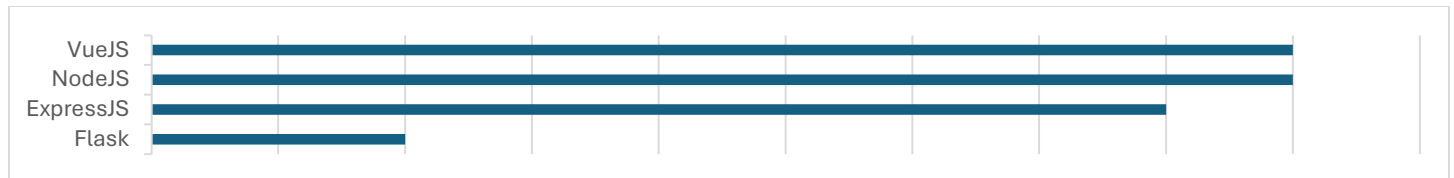
Full-Stack Development • HTML • CSS • JavaScript • VueJS • NodeJS • MySQL

Technical Skills

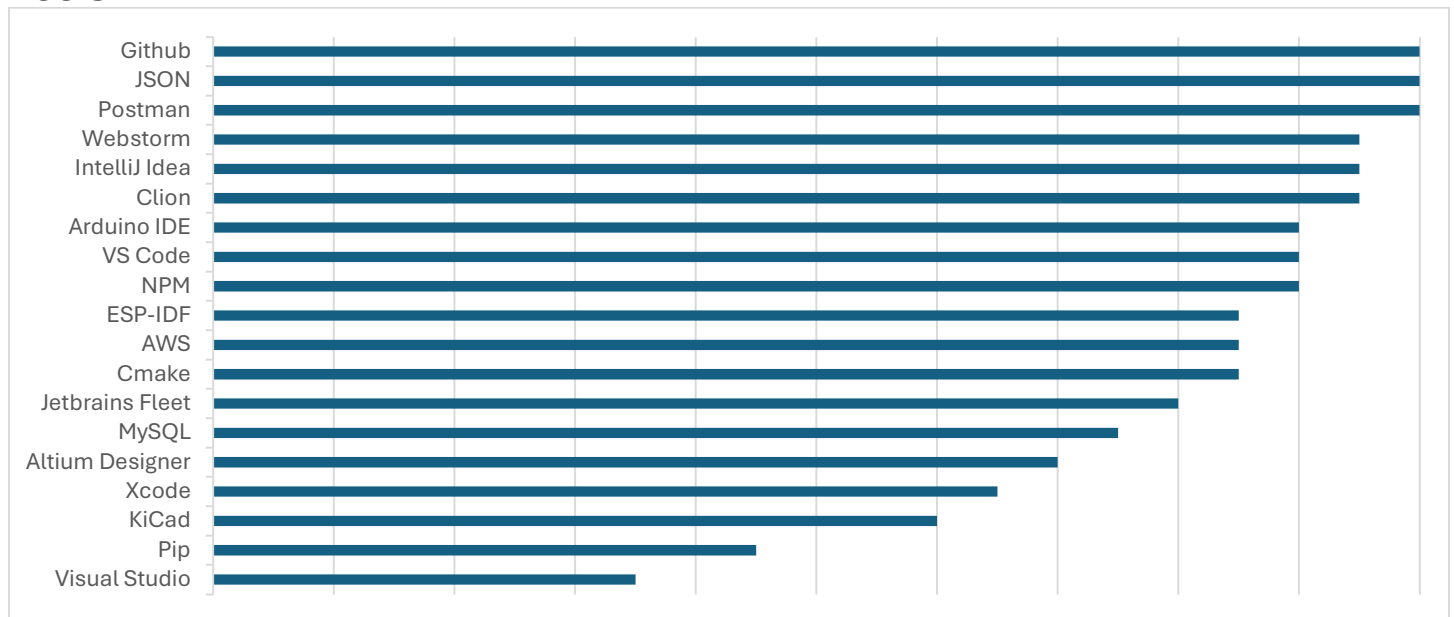
Languages



Frameworks



Tools



Essential Skills/Knowledge

