Ryan Frederich

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LinkedIn: https://www.linkedin.com/in/ryanfreder | **GitHub:** https://github.com/ryansurf

Education

University of California, Santa Cruz — Sep 2019 - Dec 2023

- B.S. Technology and Information Management (*GPA: 3.5*)
- Minor: Computer Science

Employment

Web Development Intern — Callaway Golf — Jun 2023 - Sep 2023

- Developed and maintained **CSS** and **JSP** code for an eCommerce website
- Managed and created reusable components via **SAP Backoffice**
- Automated server startup and file compilation through custom **bash** scripts, streamlining processes

Computer Science Instructor — iD Tech — Sep 2022 - May 2023

- Teaching students computer science fundamentals using **Python**
- Explained basic data structures and **object-oriented** programming

Skills

- **Languages:** Python, C/C++, Javascript/HTML/CSS, Java, SQL, Bash
- **Libraries and Frameworks:** React, jQuery, Flask, Node.js
- **Tools:** Git, Linux, Vim, Eclipse
- **Other:** Computer networking experience(**Mininet, Wireshark, Socket programming**)

Projects

Personal Website: *https://ryansurf.github.io/*

Automated Irrigation System

- Built an enclosure with a microcontroller, solenoid valve and sensor to measure a garden's soil moisture levels.
- Wrote a program in **C** to detect if the soil moisture content fell below a given threshold, and triggered the solenoid valve to turn so the garden could be watered.

KillFeed Bot

https://github.com/ryansurf/killfeed_bot

- Discord bot that notifies a Discord server every time a player eliminates another player in Bohemia Interactive's shooter game *DayZ.*
- Parses the game's logs using Python's **Requests** library.
- Can also be pinged in Discord to output the amount of players currently online.

Ocean Data Reporter

https://github.com/ryansurf/Surf_ScrapeV2

- Retrieves ocean data (wave height, tides, ocean and air temps) from buoys stationed along the coast, utilizing NOAA's buoy **API** .
- Sends a surf report via email to subscribing email addresses at a specified time using **cron** on a Raspberry Pi.
- Stores data in a database using **MySQL** for analysis of trends overtime.