Aidan Brown

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EDUCATION
August 2020- May 2023

THE UNIVERSITY OF VERMONT, Burlington, VT
Bachelor's of Science in Computer Science (Completed in Three Years)
The Honors College - Climbing Team - CS Crew (Active Member)

EXPERIENCE/PROJECTS

SOFTWARE/IOT INTERNSHIP
Summer 2022

UNILEVER - BEN & JERRY'S
- Installed & maintained H2Ok spectrometer sensors - Raspberry Pi Devices
- PLC Programming - Integrated spectrometer sensors into the Ben & Jerry's PLC (Structured Text)
- IT Server and Firewall Handling - Worked with local contractors and employees to achieve corporate connectivity
- Assisted in the creation and deployment of a web proxy, to allow for easy accessibility
- Learned how to work in an industrial factory - Coordinated with team members remotely and side-by-side
- Assisted in Google Cloud integration with H2Ok Innovations

WEB DEVELOPMENT
2021-2022

SKI MOUNTAIN CALCULATOR
- Created a ski mountain-generating website for UVM students to use
- Used a weight-based algorithm in C++ alongside PHP, HTML, and CSS
- Generates the ideal ski mountain in Vermont based on a short survey
- Collaborated with GitHub

WEB INSTRUMENTS MARKETPLACE (in progress)
Present
- Building an online marketplace for musical instruments using Python, Flask, MYSQL, JavaScript, and HTML/CSS
- Working with a team of four using an Agile software development process
- Building a full stack, user friendly system

PERSONAL PROJECTS

ROCK-CLIMBING SORTING PROJECT
- Utilized various data structures and algorithms to sort a large database of the top 1000 climbing routes in the United States (separate chaining, linear probing, bubble sort, etc.)
- Learned the efficiencies, versatilities, and drawbacks of different sorting algorithms and data structures
- Object oriented programming in C++

C++ ARCADE SIMULATOR
April - May 2022
- Developed with C++ with OpenGL to create an arcade interface with games like Snake, Doodle Jump, Flappy Bird, and more
- Utilized Git and GitHub to collaborate with teammates
- Produced a simulator that runs on MacOS and Windows
- Succeeded with a small team

SQLITE QUERY PROJECT
September 2022
- Created a query language with a rock-climbing routes and mountains dataset
- Built a Python and SQLite program to respond to user queries
- Developed with a small team using Git and GitLab
- Learned general SQL database syntax and functionality

TEACHING & MANAGEMENT
2021-2022

FACILITY OPERATIONS ATTENDANT
- Management in The University of Vermont Athletic Center
- Handled safety precautions during the COVID-19 Pandemic

TEACHER'S ASSISTANT CS124
- Assisted students taking C++ related coursework
- Improved C++ skills by teaching others
- Coordinated office hours and exam/homework help

ADDITIONAL SKILLS AND COURSEWORK

Algorithm Design and Analysis - Database Systems - Object Oriented Programming - Data Structures - Linux - Mathematical Knowledge (Calculus & Statistics) - Git - GitHub - Cloud Integration - Management - Communication - Operating Systems - Intro to Programming: Python - Advanced Programming: C++ - Intermediate Programming: Java - Data Structure and Algorithms: C++ - Computability and Complexity - Cybersecurity Law and Policy - Computer Organization (hardware) - Linear Algebra - Discrete Structures - Calculus I, II, & III - Statistics

LANGUAGES AND TECHNOLOGY

C++ - Python - Java - C - PHP - JavaScript - HTML - CSS - GIT - GitHub - Rasbian - MySQL - PLC - Flask