Cooper Zion

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EDUCATION

University of Vermont (UVM), Burlington, VT — Expected Graduation: Spring 2024 (2028 for master's)

Bachelor of Arts in Computer Science (Pursuing a master's in computer science) — *GPA: 3.5*

- **Related Courses:** Operating Systems, Advanced Computer Architecture, Software Engineering, Algorithm Design & Analysis, Advanced Programming, Graphical Communication, Physics, Mechanical Engineering Shop Experience, Data Structures and Algorithms, Discrete Structures, Computability & Complexity, Database Structures, Applied Linear Algebra

TECHNICAL SKILLS

- Python
- Java
- C & C++
- MySQL
- SolidWorks, Inventor
- Photoshop, Illustrator
- Markdown, HTML
- Git, GitHub, GitLab
- Raspberry Pi, STM32, Arduino
- OpenGL

RELATED EXPERIENCES

Instructing in Computer Science, Burlington, VT — August 2022 – Present

Instructor, Grader, Teaching Assistant

- Provided dedicated work as an assistant to several instructors across many courses, often responding to spontaneous requests for support with various assignments and projects.
- Wrote lesson plans for and led supplemental instruction sessions, including exam prep, special topics review, and general aid sessions.
- Aided in the management of courses as an administrative assistant for multiple instructors and hundreds of students at a time.

Vex Robotics Competition, Bradenton, FL — Fall 2017 – Spring 2020

Team Captain, Builder, Design Supervisor, Treasurer

- Fostered a team of 5 people to build a robot to compete globally in various challenges.
- Delegated tasks to team members appropriately to build the robot, troubleshoot problems, and design solutions most efficiently.
- Managed funds and oversaw organizational affairs.

RELEVANT PROJECTS

Shop Manager, Bradenton, FL — Fall 2016 – Spring 2020

- Managed and maintained many tools in a wood shop, metal shop, and 3-D printing lab.
- Managed the budget and purchased supplies.
- Advised the purchase of new tools and assembled Prusa brand 3-D printers.

Woodworking, Burlington, VT — Fall 2016 – Present

- Served as an apprentice under a woodworker, learning how to work under a leader, apply someone else's vision, and take constructive criticism.
- Pursued woodworking as an entrepreneur, building a business selling wood products such as cutting boards.

Alchemi Drink Dispenser, Burlington, VT — Spring 2023

- Used CAD to design a device that dispenses up to four different liquids to make a drink (ie. Grenadine and Coke to make Cherry Coke).
- Assisted with the design and helped code an attractive touch-screen UI to control the device.
- Worked with my team to troubleshoot errors with software, hardware, and the connections between them.

ADDITIONAL EXPERIENCE

Creative Microsystems, Waitsfield, VT — April 2023 – Present

Firmware Engineer

- Worked independently with a small team to develop firmware and hardware for various CUI projects.
- Learned from an experienced programmer about C, C++, 3D mathematics in programming, and OpenGL.
- Wrote new procedures for developing Bluetooth between unique and specialized devices with Nordic UART.