Hayden Murphey

github.com/haydenmurphey | linkedin.com/in/haydenmurphey

EDUCATION

James Madison University, Harrisonburg, VA — Expected Graduation Date: **December 2025**

Bachelor of Computer Science

Minor in Music

Relevant Coursework: Data Structures, Algorithms/Algorithm Analysis, Computer/Operating Systems, Web Development, Software Engineering, Programming Languages, Discrete Structures

SKILLS

Technical Skills: *Agile Methodology (SCRUM), API Integration, CLI, Git, SVN*
Languages: *C, CSS, Haskell, HTML, Java, JavaScript, Python, Ruby, Rust, Swift*
Frameworks/Libraries: *Bootstrap , CMake, JSON, JUnit/pytest, NumPy, OpenCV, pandas, ROS2, Tailwind*

Certifications & Professional Memberships:

- *(ISC)2 Certified in Cybersecurity (Issued Feb: 2025)*
- *Association for Computing Machinery (ACM), Student Member*

WORK EXPERIENCE

DataAnnotation, freelance remote — May 2025 - Present

Software Validation - AI trainer (contract)

- Review, correct, and validate code results against specifications and test cases to improve quality
- Work extensively with JSON and Node.js to reproduce issues, debug logic errors, and verify fixes

Townes Site Engineering, Midlothian, VA — May 2021 - August 2025

Geotechnical Technician

- Worked full time alongside a team of engineers & geotechs
- Conducted on site and in lab independent testing/inspections on materials including soil, concrete, and steel

PROJECTS

MusicCPR, Harrisonburg, VA — October 2022 - July 2023

Assistant Researcher

- Coordinated with professors on solving various bugs within the program
- Conducted independent testing on the software using my background in music

PintOS (CS 450: Operating Systems), Harrisonburg, VA — Fall 2025

James Madison University

- Collaborated with a team to plan milestones, stay on timeline, do code reviews, and integrate features for PintOS
- Reimplemented the timer subsystem (timer_sleep) with interrupt-driven sleep queues, eliminating busy-waiting and improving CPU utilization/thread scheduling
- Implemented user-mode processes and expanded syscalls (exec/wait, file I/O & management) to enable realistic user programs and file browsing

Application Development (CS 343), Harrisonburg, VA — Fall 2025

James Madison University

- Built a fully client-side web app that serves real users, performs full CRUD with localStorage persistence, and integrates third-party APIs via asynchronous JavaScript; deployed to a public URL
- Implemented an accessibility first design following WCAG (Web Content Accessibility Guidelines) standards

ORGANIZATIONS

Dukes Making a Difference (DMAD), Harrisonburg, VA — Fall 2022