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EDUCATION

University of Maryland, Baltimore County (UMBC)

B.S. Major: Computer Science – Data Science, Minor: Psychology

Honors: Deans List Fall 2024

Baltimore, MD

Expected: Spring 2028

TECHNICAL SKILLS

Languages: C++, Python

Developer Tools: Git, Docker, VS Code

Cloud & AI: Google Cloud, Vertex AI

Productivity & Collaboration: Google Workspace (Docs, Slides), Microsoft PowerPoint, Canvas, Blackboard, Zoom, Webex

WORK EXPERIENCE

SI PASS Leader | UMBC Academic Success Center |

January 2025- Present

- Created accessible instructional materials using Google Docs and PowerPoint, distributed tagged PDFs, and managed Canvas and Blackboard resources to support in-person and remote learning.
- Facilitated 2 weekly peer-led study sessions and provided ongoing support via email, virtual platforms and in-person sessions, guiding students through problem-solving while adapting explanations to individual learning needs.
- Facilitated exam review sessions for 10–30 students by troubleshooting Zoom/Webex audio, Canvas permissions, file access, and other minor technical issues to ensure uninterrupted participation.

PROJECT EXPERIENCE

Virus Detection App | C++

May 2026

- Implemented dynamic hashing with linear, quadratic, and double-hash probing for DNA-based virus signature detection
- Designed incremental rehashing, lazy deletion, and load-factor monitoring to maintain performance under collisions and table growth
- Implemented core operations including insertion, search, removal, and ID updates with full unit testing and memory-safe logic

Room Safety Analytics Tool | GridHack2026 Project | Python

April 2026

GitHub: <https://github.com/MWare-7938/Room-Check>

- Developed a Python application to analyze environmental sensor data and evaluate room safety conditions.
- Designed rule-based validation to verify AI-generated conclusions and reduce false positives.
- Collaborated with a team during GridHack to build and present a working prototype.

Morse Code Translator Tool | miniHackathon Project | C++

April 2026

Devpost: <https://tinyurl.com/3d3kt89w>

- Implemented a Morse code translator using a binary tree structure to map Morse sequences to lowercase English letters.
- Designed traversal logic to decode Morse input by navigating left/right tree branches representing dots and dashes.

- Added support for English-to-Morse translation using string manipulation and Map ADT to ensure consistent lowercase processing via reference chart of Morse letters.
- Engineered prompt pipelines for Vertex AI and integrated model outputs into a functional web interface.
- Deployed the application on Google Cloud, configuring hosting, environment setup, and API access.
- Tested and debugged the application locally via terminal on Docker before deploying to the network.

EXTRACURRICULAR ACTIVITIES

Engineering Without Borders (Member)
UMBC Sustainability (Volunteer)

March 2025 - Present
October 2024