

EDUCATION

University of Maryland, Baltimore County, Baltimore, MD

Expected: June/2025

Bachelor of Science in Computer Science

SKILLS

Programming Languages: Python, C++, JavaScript, C, Scheme, x86 assembly

Web & Software Development: HTML, CSS, Qt, PyQt, Git, Docker, Linux, SQL, React, Nodejs

Tools & Technologies: Unity, Unreal Engine, RVIZ, Figma

PROJECTS

Github: <https://github.com/JasonAK19>

Portfolio Summer 2024

Developed a responsive and modern portfolio website using HTML, CSS, and JavaScript. The website showcases my +projects and skills, featuring a clean and intuitive design optimized for various devices and screen sizes. [Link](#)

First person game Winter 2024

Python first person game made with techniques like floor casting, raycasting, AI implementation as well as random map generation

Satellite Network Fall 2023

C++ program manages a satellite network using a balanced binary search tree (AVL tree)

Potion Shop Spring 2023

Developed a C++ command-line potion-making game that applied object-oriented programming principles. The project involved designing game logic, managing user interactions, and implementing robust testing and debugging processes.

Simulated File System Fall 2022

Python based file system that mimics basic UNIX commands, Implemented directory navigation, file creation, and deletion operations, enabling a user to interact with a hierarchical directory structure

School Life Fall 2021

A Java-based RPG to simulate the college experience for incoming freshmen. The game employs Object-Oriented Design for modular code and features dynamic decision trees, random events, and time/resource management.

WORK EXPERIENCE

Software Engineer Intern, **Sonavex Inc**, Baltimore, MD

May 2024 - Present

- Designed and implemented an advanced Graphical User Interface (GUI) using PyQt.
- Created and managed a database of medical scans utilizing SQLite.
- Developed and maintained a robust backend using Python.

National Security Scholar Intern, **Army Research Lab**, Aberdeen, MD

May 2023 - August 2023

- Involved in designing solutions to solve the Army's multi-agent simulation problem.
- Developed interactive gaming experiences utilizing the Unity Game Engine.
- Successfully facilitated seamless integration between the Unity and Unreal Game Engines through the implementation of SQL.
- Proficiently designed and developed a Graphical User Interface (GUI) within RVIZ.
- Technology Stack: C#, Unity, Unreal, ROS 1/2, C++, Python, QT, RVIZ, and SQL

Near Peer Mentor, **Army Educational Outreach Program**, Adelphi, MD

June 2021 – August 2021

- Worked in a team of other college students to help teach STEM topics to elementary school students.
- Created modules for students to learn about programming in python and working with raspberry pi.

EXTRACURRICULAR ACTIVITIES

Member, National Society of Black Engineers, UMBC

Fall 2021-Present

ACADEMIC COURSEWORK

CMSC 341- Data Structures and Algorithms

CMSC 331- Principles of programming languages

CMSC 441- Design and Analysis of Algorithms

CMSC 421- Operating Systems

CMSC 471 - Intro to AI

CMSC 447 - Software Engineering

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