

EDUCATION

University of Maryland, Baltimore County, Baltimore, MD

Expected: June/2025

Bachelor of Science in Computer Science

SKILLS

Programming: Java, JavaScript, HTML, CSS, Python, C++, Scheme, C, Docker, Git, Linux

PROJECTS

Github:

<https://github.com/JasonAK19>

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.

Metro lines

Spring 2022

This Python program implements a metro system management tool using various methods and techniques for effective organization of metro-related data.

Satellite Network

Fall 2023

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

First person game

Winter 2024

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

WORK EXPERIENCE

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

May 2024 - Present

- Designed and implemented an advanced Graphical User Interface (GUI) using PyQt and Figma.
- Created and managed a database of medical scans utilizing SQLite.
- Developed and maintained a robust backend using Python.
- Developed a custom technology stack after evaluating and testing various tools and frameworks to ensure optimal performance and compatibility.

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

Member, National Honour Society, New Town High school

April 2018 - June 2021

ACADEMIC COURSEWORK

CMSC 203- Discrete Mathematics

CMSC 341- Data Structures and Algorithms

CMSC 331- Principles of programming languages

CMSC 441- Design and Analysis of Algorithms

CMSC 313- Assembly Programming Language

CMSC 421- Operating Systems

CMSC 471 - Intro to AI

CMSC 481- Computer Networks

AWARDS

Grit and Greatness Scholarship

Fall 2021 - Present