

**EDUCATION****University of Maryland, Baltimore County, Baltimore, MD****Expected May 2021**

- Bachelor of Science in Computer Science, GPA: 3.03
- Honors:**
- Dean's List

**TECHNICAL SKILLS****Programing**

Python, C, C++, C#, Java, SQL, Shell Scripting, Assembly

**Web Development**

HTML, CSS, PHP, JavaScript, Bootstrap, jQuery, NodeJS, AnjularJS, Rails, React, Gatsby

**Software**

JetBrains Software Suite, PuTTY, AutoCAD, Cura, Proxmox, VMWare Suite, Docker, Eclipse, Git, Microsoft Office, Android Studio, Google Cloud, Arduino

**Operating Systems**

Windows XP/Vista/7/8.1/10, RHeL/Ubuntu/Unix, FreeBSD, Windows Server 2008 R2 &amp; 2012

**PROJECTS****RSA Encryption Breaker**

Spring 2020

- Designed a python version of the RSA keygen algorithm to create a private key using strong primes
- Implemented a python program to attack the private key using a variety of known methods to factor the sum of two primes

**Kernel Level System Call Blocking**

Fall 2020

- Implemented a method of blocking individual sys-calls in the Linux kernel using C
- Created checks at the kernel level to check a skip list to see if a given system call was block by the user

**APRS Packet Generator**

Winter 2019

- Developed a Python 3 program on a Raspberry Pi to read data from a weather station and interpret it into meaningful, user understandable information
- Created a system for encoding data into audio packets to be delivered using a ham radio and then published onto the internet, including a personal website

**FORTH-Like Interpreter**

Fall 2018

- Worked to implement an interpreter for a FORTH like programing language in C++
- Developed a lexical parser for interpreting various characters and commands from a text file, placing them in appropriate data structures, and then handling those structures as commands are executed

**WORK EXPERIENCE****Jewish Community Center, Aquatics Instructor, Owings Mills, MD**

July 2017 – Present

- Worked directly with members across multiple age groups
- Taught a variety of American Red Cross programs and classes
- Led the ongoing training and skill development of staff (making sure staff is certified up to current standards)

**JCC, Lifeguard & Shift Supervisor, Owings Mills, MD**

May 2017 – Present

- Maintained a safe and welcoming environment in all aquatic areas
- Created a rotation/work schedule for co-workers to follow

**UMBC Chemistry Dept., Lab Assistant, Baltimore, MD**

September 2018 - Present

- Design models/parts to be rapidly prototyped
- Continued maintenance and calibration of lab 3D Printer
- Calculated printing costs and optimal interior design of 3D objects using Cura and Slic3r

**RELEVANT ORGANIZATIONS****UMBC Student Government Association, Communications Team Member**

Fall 2017 – Present

- Collaborated with team members to advertise various SGA events and activities

**Game Development Club, Member**

Fall 2018 – Present

- Worked as part of a team to develop (Java, GameMaker Studio, Unity, etc.) and test video games

**ACADEMIC COURSEWORK**

Computer Science I &amp; II for Majors

Design and Analysis of Algorithms

Discrete Structures

Principles of Programming Languages

Data Structures

Computer Architecture

Calculus and Analytic Geometry I

Calculus and Analytic Geometry II

Computer Organization &amp; Assembly

Data Visualization

Principles of Operating Systems

Programing

Intro to Artificial Intelligence