Andrew Ingson

Westminster, MD 21158
aings1@umbc.edu • aingson.xyz • github.com/ADMARIl

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, MongoDB
Web Development	HTML, CSS, PHP, JavaScript, BooStrap, jQuerry, Rails, React, Gatsby, Expo
Software	JetBrains Software Suite, PuTTY, AutoCAD, Cura, Proxmox, VMWare Suite, Docker, Eclipse, Git, Microsoft Office, Android Studio, Google Cloud, Arduino, Unreal Engine 4
Operating Systems	Windows XP/Vista/7/8.1/10, RHeL/Ubuntu/Unix, FreeBSD, Windows Server 2008 R2 & 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

Impossible Tic-Tac-Toe   Spring 2020
- Developed a new implementation of the class game of tic-tac-toe using artificial intelligence that is statistically impossible to beat.
- Created a minimax algorithm as the foundation of the computer player's artificial intelligence.

Kernel Level System Call Blocking   Fall 2019
- 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

WORK EXPERIENCE

UPS Information Services, *QA and Object Automation Co-Op,* Timonium, MD   August 2020 - Present
- Improved the automation smoke testing for WorldShip, UPS's large-scale business shipping software
- Developed new methods of testing live updates to actively running WorldShip instances

Booz Allen Hamilton, *Software Engineering Summer Intern,* Annapolis Junction, MD   June 2020 – August 2020
- Delivered covert communications solutions over air-gapped networks using technologies such as quiet and android
- Investigated vulnerability of hardware to malicious communications techniques such as audio and RF
- Worked with a team of fellow interns to develop a project, from concept to prototype

Jewish Community Center, *Aquatics Instructor & Supervisor,* Owings Mills, MD   June 2016 – March 2020
- 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)

UMBC Chemistry Dept., *Lab Assistant,* Baltimore, MD   September 2018 – March 2020
- Design models/parts to be rapidly prototyped
- Continued maintenance, calibration, and optimization of an industrial lab 3D Printer

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 & 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 & Assembly Programing
Data Visualization	Principles of Operating Systems	Intro to Artificial Intelligence
Database Management Systems	Principles of Software Engineering	Graphics for Games: Unreal Engine