

Education

University of Arkansas

2018-Present

Candidate for a Bachelor of Science in Computer Engineering

Current GPA 3.68

Candidate for a Bachelor of Science in Computer Science

Current GPA 3.68

Minor in Mathematics with an expected graduation date of May, 2022

Courses Taken

Computer Security (CSCE 5323), Computer Architecture (CSCE 4213), Embedded Systems (CSCE 4114), Database Management Systems (CSCE 4523), Operating Systems (CSCE 3613)

Skills

RSA encryption, FPGA Programming, FreeRTOS, Java, C++, VHDL, Verilog, JavaScript, Python, SQL, HTML, Micro processing simulations, Assembly Programming.

Class Projects

Security Education (SEED) labs

2021

Completed two SEED labs. Both completed using a Linux virtual machine. One was writing C++ code that would perform all aspects of RSA encryption. Encryption, decryption, and finding missing values of the RSA equation. The second SEED lab was using dockers, PHP code, and some C++ Code to simulate a website with proper log in procedures in order to simulate SQL injection attacks and prepare a defense for those attacks.

Website Database Manager

2021

Created a basic website database manager using Python and PHP. To store different basketball teams and matches. It would read in user input from the site and store it into the database via SQL commands. Also has the capability to sort the data so the user could view the results of all games that one team played or all games on a specific day.

Side Scroller Game

2020

Created a version of Mario using model view architecture. That could read and write .JSON files. Implemented using polymorphism, inheritance, and an abstract class. Originally written in Java and ported to Java Script, Python, and onto an android phone

Sudoku Solver

2020

Created a program in C++ that will read in a sudoku board and find the solution using backtracking. If the sudoku board is unsolvable then the program will return that there is no solution.

Other Experience

Undergraduate Teaching Assistant

2020

Teaching assistant for Computer Organization (CSCE 2114) and the University of Arkansas. Independently taught 50 students VHDL and Assembly paradigms in 2 weekly hybrid labs via lectures and live demonstrations. Worked closely with students to troubleshoot their projects and gently guide them towards the solution both in class, office hours, and via email. All while being a full-time student and maintaining a 3.6 GPA.

Awarded the Eagle Scout Rank in the Boy Scouts of America

2016

Instructed a group of 50 volunteers to complete a \$500 landscaping project for a local school. Independently planned the project over the course of 3 months. Fundraised from local businesses and BSA fundraising events. Communicated project initiatives publicly to large crowds.
