

# HENRY BRAND

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## EDUCATION

### University of Tennessee

Bachelor of Science in Computer Science *GPA: 3.71/4.0*

Knoxville, TN

Aug 2020 - May 2024

## RELEVANT COURSEWORK

Programming:	Data Structures and Algorithms, Systems Programming, Operating Systems, Computer Graphics, Cybersecurity, Software Engineering, Scientific Computing
Math:	Discrete Structures, Calculus III, Matrix Algebra, Differential Equations Probability and Random Variables
Circuits:	Circuits, Digital Systems Logic

## SKILLS

Programming (Proficient):	C/C++, HTML, CSS
Programming (Beginner/Intermediate):	Python, C#, Javascript, VHDL
Tools and Frameworks:	.NET, OpenGL/WebGL, Docker, Git, Agile(Scrum)
Operating Systems:	Windows, Linux, OS X

## PROJECTS

### Falcon Quarantine Automation

Programmed a Python script that accessed the CrowdStrike Falcon API to automatically close the internet connection of a compromised Memphis City work computer. Currently used by the Memphis City Department of Information Technology.

### Python Multiplayer Tetris Game

Led a team in building upon an existing, bare-bones Tetris single player client to add online multiplayer and numerous other quality of life features.

### Video Game Recipe Calculator Website

Designed and hosted a website dedicating to help players for the video game Randomly Generated Droids keep track of their in-game crafting capabilities. URL available on my homepage.

### 3D Solar System Model Webpage

Created a 3D animated model of the solar system using WebGL for a computer graphics project.

### Threaded Chat Server

Designed a command line internet chat server in C for a systems programming lab assignment.

### Roblox Asset Trading Bot

Developed a Python script that uses the Roblox web API to scan for virtual items being sold at a below fair market price and automatically purchase them for monetary gain.

### Air Hockey Table

Led a team in designing, prototyping, and ultimately constructing a functioning small air hockey table for a freshman year team engineering project.

## WORK EXPERIENCE

### Memphis City IT Department Intern (Programmer) - Summer 2022

Worked for the Memphis City IT department to help automate the typical daily busy tasks of an IT worker such as reviewing recent network detection data and quarantining devices with recent suspicious activity.

### Chick-fil-A Cashier - Summer 2021

Learned to work with a team to fulfill orders at one of the busiest Chick-fil-A locations in the nation.

## RELEVANT STUDENT INVOLVEMENT

### HackUTK

Competed in the U.S. Department of Energy's 2022 Cyberforce Competition as a blue teamer for the University of Tennessee Knoxville. Helped configure security settings on the Amazon Web Services EC2 servers and solved anomalies (online cybersecurity puzzles) to score points for my team.