

I am a Name

CONTACT

- ☎ Them digits
- ✉ Electronic Mailbox

SKILLS

C++

Embedded C

Verilog

JavaScript

Python

MIPS Assembly

Cadence Virtuoso

Code Composer Studio

Intel Quartus Prime

ModelSim

EDUCATION

VIRGINIA TECH – Blacksburg, VA

May 2020

B.S. COMPUTER ENGINEERING

Graduated Cum Laude with an overall GPA of 3.53 on a 4.0 scale

COURSE PROJECTS

Embedded System Design (Senior Capstone)

Spring 2020

- Worked with a team of 3 to design and code an autonomous rover system
- System included a three-wheeled rover with an arm and a sensor suite, and a smaller tracked rover
- Rovers moved around large area using IR and ultrasonic sensors, avoiding walls and obstacles, and sorted colored blocks with the arm

Digital Design (Verilog)

Fall 2019 - Spring 2020

- Created a system to generate a sine wave using CORDIC algorithm and the audio codec on an Altera DE1-SoC board
- Designed a system to create a simple Pong game using the video codec on an Altera DE1-SoC at a resolution of 1024 x 768 @ 75 Hz
- Tested performance and area of several 32-bit adder and multiplier designs

VLSI Circuit Design

Fall 2019

- Designed logic and transmission gates, 4 and 16-bit adders, NAND memory cells, and a 4 x 4 systolic array using Cadence Virtuoso
- Tested circuits to confirm function, find ideal operating temperatures, and ideal transistor W/L ratios

Applied Software Design (C++)

Fall 2019

- Wrote an interpreter for a custom scripting language and a GUI for the interpreter via QT
- Wrote and tested a multi-threaded Quicksort algorithm

Video Game Design

Fall 2019

- Created about 10 video games with custom graphics in JavaScript
- Created 3 video games in Embedded C for a TI MSP432 microcontroller