# **Chase Mulder**

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# **EDUCATION**

**Grand Valley State University, Allendale MI** 

Bachelor of Science: Computer Science Major GPA: 3.42

Minor: Computer Engineering & Mathematics

Dean's List: April 2020 – Present

## **PROJECTS**

Stock Ticker Fall 2021

- Fabricated a virtual stock ticker that successfully connected to the internet and utilized the software XAMPP, Apache, and MariaDB to run SQL code
- Designed, implemented, and managed a database where users could select which stock tickers to track
- Aided in the creation of the Database's server and configuration of its port settings
- Managed time and planned according to the System development life cycle

Galaga Python Game

Fall 2021

- Developed the alien space shooter game Galaga in PyGame, Python code
- Compiled python code into an executable terminal game with working sounds, music, and spaceship icons
- Used dynamic memory management in the program to efficiently store data

#### **Star Wars Slots FPGA Board**

Winter 2020

- Developed a slots machine utilizing knowledge of Boolean algebra, combinational and sequential logic, and state machine design
- Designed a digital system using the MSP432 micro processor's hardware description language-based manual
- Gained a command on microprocessor architecture and programming of microcontrollers in C code

#### **Robot Soccer Competition**

Fall 2019

- Built a soccer-playing robot that accomplished scoring a goal
- Developed C Code for the Arduino Mega microcontroller that controlled ultra-sonic and IR sensors that helped the robot wall follow
- Manufactured 3d printed robot parts in Solid-Works while crafting high-level engineering design drawings
- Improved the design using high torque dc motors and a metal chassis

#### PROFESSIONAL KNOWLEDGE & TECHNICAL SKILLS

• C/C++

Engineering Design

• Git

Expected Graduation: December 2022

Java

• Micro Controllers

Assembly Code

Python

• SOL

Circuits

• Linux

• Differential Equations

Solid Works

## INDEPENDENT INITIATIVE

#### Master Reset Old 2012 Mac Desktop

Winter 2022

- Partitioned Mac's hard drive and learned about inner systems working
- Communicated with Apple Support to debug a reoccurring problem of white screening
- Configured desktop to 2019 using terminal commands as a programming exercise