# **Matthew Sand**

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## **Education**

#### University of Central Florida | 3.0 GPA

**Expected Graduation 2025** 

College of Engineering and Computer Science

#### Suncoast Community High School | 3.27 / 4.2 GPA

Graduated 2021

Math, Science, and Engineering Program and Computer Science Program

Relevant Courses: AP Computer Science 1, IB Computer Science, Java Databases, Intro to C, Computer Science 1, Computer Design and Architecture

#### Skills

Certifications: ICT Essentials: Databases, Multi-Media, Game Design, Web Design, Graphic Design

Proficiencies: MacOS, Windows, UNIX, Node.js, Git, JQuery, Websockets

Programming Languages: HTML, CSS, JavaScript, SQL, PHP, Python, Java, C, MATLAB

### **Projects**

#### **Programming Homework Submission and Testing System**

March 2020

- Constructed website for students to write and test their code from home during Coronavirus
- Designed and implemented interface using flow charts capable of dynamically highlighting parts of user submitted code
- Created a php based file directory for students to save or upload their code to
- Used SQL database to store encrypted user login info and keep track of user tokens

#### WIFI Hotspot Locator

February 2021

- Utilized the Google Maps API to display markers and WIFI hotspots around the user
- Created SQL based database of WIFI hotspots using the Open Maps API
- Designed interface for interacting with, and displaying information from, the service's database of hotspot information

## Computer Remote Control App

April 2021

- Created a PWA based application to allow the running of custom scripts on a user's computer from the push of a button on their phone
- Designed and implemented dynamic interface for user to create custom actions and have their corresponding buttons display on screen
- Utilized Node based websockets to allow for sending of button press information on user's phone app to be sent to a companion app on the user's computer

#### WikiHow Article Guessing Game

January 2022

- Constructed website that has the user attempt to guess what article from the website WikiHow a random image corresponds to
- Created Python script to randomly retrieve articles, and their corresponding images, and save them in a standard JSON format
- Implemented a SQL database to keep track of overall user scores and high scores

# Competitions

Hack Suncoast Hackathon January 2020

Lead in the design and construction of personal pet website to incentivize students to complete work

October 2020 Palm Beach Tech Hackathon

Participated in creation of website for bone marrow donors to anonymously communicate with their donatee

Blueprint / HackMIT Hackathon

Lead the creation of website to display a database of nearby free WIFI hotspots

GameDev Knights Gamejam October 2021

Assisted in the design and programming of mechanics of horror game

## <u>Leadership</u>

Student Government Association (SGA)

Secretary, Vice President, Logistics Coordinator

Science, Engineering, Communication, Mathematics, and Enrichment Club

Vice President

Team Lead

Space Exploration and Engineering Club

STEM10

Design Manager

February 2021