Devin Arena

djarena3577@eagle.fcu.edu • +1 (239) 776-1457 • Naples, Florida • <u>LinkedIn</u> • <u>Github</u> • <u>Portfolio</u>

Motivated student and developer interested in Software Engineering and Information Technology.

EDUCATION

Florida Gulf Coast University   **Fall 2019–Fall 2022**
Bachelors of Science in Software Engineering   Fort Myers, Florida
Minor in Mathematics   GPA: 4.0/4.0

- President's List (4.0 GPA) - 4 time recipient

WORK EXPERIENCE

Florida Gulf Coast University   **January 2020-December 2020**
Teaching Assistant - General Chemistry I and General Physics II   Fort Myers, Florida

- Assisted the professor in explaining complex concepts of General Physics II and General Chemistry I

Florida Gulf Coast University   **December 2020–Present**
Physics Research Assistant - Dark Matter Phenomenology   Fort Myers, Florida

- Studying simulations involving the Big Bang and the effects of dark matter
- Working on and maintaining university Windows and Linux machines
- Updating current models using C++
- Automating MadGraph, MadAnalysis, and other tasks using Python

TECHNOLOGIES AND LANGUAGES

- Languages: Java, C++, C, Javascript, C#, Dart, Python, HTML, CSS
- Technologies: Git, MySQL, SQLite, Flutter, Android Studio, React, Node.js, Linux, Vi/Vim, Arduino, Raspberry PI
- Coursework: Data Structures and Algorithms, OOP, Data Engineering, Computer Organization, Software Security

PROJECTS

- **Product Log -** A full-featured cross-platform mobile application developed using the flutter SDK. Allows users to document their purchases by either entering a UPC, scanning a barcode, or simply adding the product dynamically. Product information is stored in a local SQLite database and can be looked up, searched by name or tag, and sorted. Stored information includes UPC, picture, name, manufacturer, description, price, quantity, etc.
- **AppTracker -** A web application developed using React that catalogs internship and job applications. Allows the entry of company information and notes about the company, and tracks the number of interviews, rejections, offers. Stores information in local storage and allows users to import or export their current application data as JSON.
- **Pixel Striker -** A cross-platform mobile soccer arcade game developed using the Godot game engine. Includes multiple game modes, shot types, and control styles. Saves user's best scores and settings using preferences. Uses Google Play Game Services for leaderboards and achievements.
- **RedditImageGrabber -** A simple, powerful Python application created to grab images from specific subreddits using PRAW and the Reddit API. Displays grabbed images on a nicely formatted and dynamically generated HTML page.
- **Telegram Message Counter** - A desktop application developed to scrape and analyze a set of Telegram messages exported from the Telegram desktop app using BeautifulSoup. Displays the number of messages per month and year on a bar plot or line plot using tkinter and matplotlib.
- **Minesweeper AI -** An implementation of a minesweeper AI written in pure javascript. The AI determines the best move to make based on a probability map for each tile generated using real minesweeper solution tactics.
- **Arduino Traffic Light -** A program written for an ATMega328 Arduino microcontroller using AVR Assembly, simulates a traffic light with a crosswalk button using 4 LEDs, a push button, a breadboard, and an ATMega328 microcontroller. Demonstrates low-level software and hardware concepts such as timers and interrupts.