

W. Peyton McPhillips

Computer Science Major

904.806.4882 | peytonmcphillips@gmail.com | github.com/w-p-m | https://wpeytonmcphillips.com

Projects

Music Database - Relational Systems Project

(Python, SQL, Flask, HTML/CSS)

Designed and implemented a normalized relational database modeling relationships between artists, albums, genres, regions, and stylistic movements.

- Built a Flask-based interface to enable structured querying and exploration of interconnected music data.
- Prioritized schema clarity, extensibility, and data integrity to support future scaling and feature expansion
- Applied system design principles to connect backend data models with a user-facing exploratory interface

Weather Application

(JavaScript, REST, APIs, HTML/CSS)

Developed an interactive weather application that retrieves and displays real-time weather data based on user input.

- Integrated a third-party weather API with client-side validation and error handling
- Implemented dynamic UI updates and modular JavaScript structure
- Focused on clean data flow and responsive interaction

Arcade-Style Space Game

(Python, Pygame)

Built a complete arcade-style game emphasizing real-time systems and game loop architecture.

- Incorporated collision detection, scoring system, and dynamic enemy movement to enhance gameplay mechanics
- Demonstrated proficiency in Python programming, logic structuring, and event-driven programming.

Professional Certifications

Microsoft - Python Developer (In Progress)

Python programming, automation, data processing, and backend application development

Expected Completion: January 2026

Google - Cybersecurity Professional (In Progress)

Security fundamentals, threat detection, Linux, Python scripting, and SOC workflows

Expected Completion: February 2026

Microsoft - SQL Server & Database Development (In Progress)

Relational database design, SQL querying, optimization, and data modeling

Expected Completion: February 2026

Microsoft - Back-End Developer (In Progress)

Backend architecture, APIs, database integration, and cloud deployment concepts

Expected Completion: May 2026

Education

American University, Washington, D.C. **Spring 2027**
Bachelor of Science

Major: Computer Science

Concentration: Software Engineering and Computer Systems

Minor: Mathematics

Santa Fe College, Gainesville, Florida **Spring 2017**
Associate of Arts **GPA: 3.29**

Technical Skills

Languages: Python, SQL, JavaScript, Java, C++, C

Web & Application Development: Flask, REST APIs, HTML, CSS, Client-Side JavaScript

Databases & Data: SQLite, PostgreSQL

Tools & Concepts: Git, GitHub API Integration, Object-Oriented Programming, Data Validation, Modular Code Design

Relevant Coursework

Computer Systems Organization

Key Focus: Computer architecture, hardware-software interface

Computer Science II, Python

Key Focus: OOP, algorithms, data structures

Computer Science I, Java

Key Focus: Intro programming, problem-solving, Java

Foundations of Computing

Key Focus: CS theory, logic, discrete math foundations

Intro to Programming

Key Focus: Fundamental of Programming and problem-solving

Upcoming:

Object Oriented Programming

Key Focus: Advanced OOP design and software architecture

Discrete Structures

Key Focus: Logic, proofs, combinatorics, graph theory

Systems Programming

Key Focus: C programming, OS interfaces, low-level systems

Design and Organization of Programming Languages

Key Focus: Programming paradigms, language design