

EDUCATION

•University of Central Florida

August 2022 - May 2026 (Expected)

GPA: 3.9

Orlando, FL

Bachelor of Science in Computer Science

PROJECTS

•youtube-fxdataloader Java

March 2023

- Utility to download videos from YouTube and other media sharing websites, providing a full user interface for the yt-dlp project.
- User interface created with JavaFX, with automatic preview of thumbnail content and video information using the YouTube API.
- Used the Maven build tool to manage dependencies.

•prgrid Node.js, JavaScript, jQuery, Jade/Pug, and CSS

February 2023 - Current

- Designed an interactive web front-end to play musical notes on a piano roll grid, allowing the user to change waveform to create unique retro sounds and patterns.
- Utilized Node.js as a back-end and Pug to create cleaner HTML code.
- Used CSS to create a clean and simple user interface that anyone can recognize and use.
- Created scripts that uses JavaScript's Web Audio API to generate sounds with synthesizers.

•Graphical-GOES Python, Matplotlib, JavaScript, jQuery, HTML, and CSS

December 2022 - Current

- Developed interactive web front-end to process raw satellite data into high-quality images.
- Designed front-end interface using CSS, and developed user-interactivity with JavaScript and jQuery.
- Created sleek menu and toolbar system to allow for smooth scrubbing and video playback of satellite images and changing satellite options, such as location and band.
- Contributed to development of back-end scripts written in Python, using Matplotlib to process raw data files from NOAA AWS servers.

WORK EXPERIENCE

•Center for Distributed Learning

May 2024 - Current

Part-Time Web Developer

University of Central Florida, Orlando, FL

- Contributing to UDOIT (an open-source, all-in-one accessibility scanner for Canvas developed and used by UCF for all courses) to use a newer accessibility checking framework for compliance with WCAG 2.1.
- Feasibility testing different frameworks to see if they meet our needs at UCF, such as creating an Electron application that uses OAuth and Instructure's Canvas API and testing several Node modules such as IBM's Equal Access and comparing results against our current accessibility scanner.
- Updating various WordPress-based sites for UCF to be more accessible and WCAG 2.1 compliant.

CLUBS AND EXPERIENCE

•Wiki Knights

Jan 2023-Current

President, Contributor

Orlando, FL

- Wrote articles for the Introduction to C Programming textbook created by members of Wiki Knights.
- Created shell script to find all recently modified *.md files and determine if their *.html counterpart has also been rebuilt. Used as part of broader shift to utilize Docker for the build script for the Wiki Knights Computer Science Materials.
- Hosted a live session explaining how set up a development environment so that students can easily create and modify articles for the Wiki Knights library.
- Created and edited social media videos in order to create engaging content about open educational resources.

TECHNICAL SKILLS AND INTERESTS

Languages: C, C#, Java, Python, PHP, SQL, JavaScript, HTML, Pug, CSS, Bash/Shell scripting

Tools: Linux, Git, Docker, WordPress, JetBrains Suite, Visual Studio

Frameworks: React, jQuery, Node.js, JavaFX

Relevant Coursework: Data Structures and Algorithms I/II, Intro to C Programming, Object-Oriented Programming, Calculus I/II, Linear Algebra, Discrete Math