Bed Pandey

Orlando, FL

Student at University of Central Florida

github.com/panbed ? linkedin.com/in/bed-pandey in

EDUCATION

•University of Central Florida

August 2022 - December 2025 (Expected)

 $GPA \cdot 39$

Orlando, FL

Bachelor of Science in Computer Science

PROJECTS

youtube-fxdownloader Java

March 2023 - Current

- 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.

•boothsmultiply C March 2023

- Implemented Booth's multiplication algorithm in the C programming language.
- Designed a visual representation of the algorithm, including intermediate steps when performing Booth's multiplication algorithm, including binary data, the carry bit, and final result after multiplying in both binary and decimal representation.

•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.

Clubs and Experience

 Wiki Knights Jan 2023-Current

Treasurer. 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.
- Helped other members set up a development environment to also be able to create articles for the Wiki Knights library.
- Provided insight on ways classes can utilize open educational resources, instead of paid textbooks.

Suncoast Community High School

Sep 2019-Jan 2020

Library Volunteer

- Riviera Beach, FL Assisted students with any questions they had about printing, Chromebook usage, and general library-related
- duties.
- Helped manage Chromebook deployment, sign-in sheets, and clean up.
- Helped organize library events and monitor students.

TECHNICAL SKILLS AND INTERESTS

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

Tools: Linux, JetBrains Suite, Visual Studio, Git, Android Studio

Frameworks: jQuery, Node.js, JavaFX

Relevant Coursework: COP3502/COP3503 (Data Structures and Algorithms I/II), COP3223C (Intro to C Programming), COP3330 (Object-Oriented Programming), MAC2311/MAC2312 (Calculus I/II), MAS2103 (Linear Algebra), COT3100C (Discrete Math)