

David Liberal

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EDUCATION

Florida State University | **B.S. in Computer Science** | Tallahassee, FL 2020 - 2025

Relevant Courses: Computer Organization, Data Structures, Intro to Programming

Valencia College | Orlando, FL | **Computer Science Pathway** 2023 - 2023

TECHNICAL SKILLS

Programming Languages: C/C++, Python, SQL, Java, JavaScript, Swift, TypeScript

Frameworks: Node.JS, React.JS, Tailwind CSS, Redux, Express, Spring

Tools: GIT, Microsoft Visual Studio, Adobe XD, Figma, Visual Studio Code

PROFESSIONAL EXPERIENCE

Software Engineer Intern | Siemens Digital Industries Software | Huntsville, AL Jan 2024 - Aug 2024

- Developed an automated system to track **Open Source Software (OSS)** with **internal APIs** to ensure compliance, efficiency, and up-to-date software versions
- Modified and maintained open-source software (OSS) packages, utilizing **Python** for scripting and **Pandas** and **Openpyxl** for **data manipulation** to update Open Source Software tracking data
- Orchestrated automation of performance tests, managing **600 concurrent client applications** leading to a **40% increase in testing efficiency**.
- Engineered Python scripts automating load generator management, achieving a **40% increase** in load allocation efficiency.

PROJECTS

SoundScout | Spotify API Data Science Application - Data Visualization & Processing

- Employed **Python** as the primary programming language to develop the core functionalities
- Integrated the **Spotify API** seamlessly to fetch comprehensive listening behavior data
- Utilized **Spotify API** to **query** and extract detailed information about tracks, genres, and user-specific playlists
- Leveraged **Pandas** for **data manipulation, visualization, and analysis**, enabling efficient handling of the vast dataset obtained from the **Spotify API**.

PokeExpert | Modern Pokemon Database

- Utilized **ReactJS** to build a **responsive** and **interactive front-end**, ensuring a **modern** and engaging user interface for exploring Pokemon data.
- Employed **JavaScript** to create **dynamic elements**, enhanced **HTML** with **Tailwind.CSS**, contributing modern design
- Search engine that interacts with **RestFul API**, querying a **Postgres SQL** database of over 1000 assets
- Leveraged **Figma** for **prototyping** and **design iteration**, ensuring a user-friendly and aesthetically pleasing interface

Flixtor | Android Platform Movie Browsing App

- Leveraged **Kotlin** and **Java** to create a scalable Android application
- Implemented **asynchronous** requests via **API endpoints** to retrieve and manipulate data

CERTIFICATIONS & EXTRACURRICULARS

J.P. Morgan Chase Co. Software Engineering Virtual Program

- Made necessary adjustments to process stock price to analyze predicted trade time for stock (**Python**), applied fixes to client-side application to ensure visualized data was fetched and updated continuously via server application (**TypeScript, ReactJS, Express**)

Mastercard Cybersecurity Virtual Program | Threat Analysis

- Conducted **phishing threat analysis** at Mastercard, focusing on identifying and interpreting phishing emails, developing a phishing email simulation, and implementing strategies for threat prevention and mitigation