

## Education

- 2023–Present **Florida International University**,  
*Computer Science, Master of Science.*
- 2019–2023 **University of Florida**,  
*English with Minor in Computer Science, Bachelor of Arts.*

## Relevant Courses

Classroom Discrete Structures and Mathematics, Analytical Geometry and Calculus, Differential Equations, Data Structures and Algorithms, Operating Systems, Computer Organization and Architecture, Computer Graphics, Advanced Machine Learning

## Skills

Languages C/C++, Python, Java, HTML, CSS, SQL, JavaScript, Powershell, Bash  
Frameworks PyTorch, React, React Native, MySQL, Node.js  
Tools Anaconda, Git, Visual Studio, Jupyter Notebook, Google Colab, Figma, Docker

## Experience

- May 2024 - **Enterprise Architect Intern**, NEXTERA ENERGY RESOURCES.  
Present
  - Lead a team-wide initiative developing a production-grade prompt to optimize user content for AI applications and automation in content curation.
  - Design proof-of-concept programs and tools using Python while driving project progression through agile methodologies and Jira
  - Conduct comprehensive research into prompt engineering and Large Language Models, facilitating iterative experiments and thorough documentation of changes for continuous enhancement of the prompt project.
- Feb 2024 - **Graduate Research Assistant**, FLORIDA INTERNATIONAL UNIVERSITY.  
Present
  - Led a team of 5 individuals in a research project aimed at benchmarking copyright violations within large language models (LLMs).
  - Conducted in-depth research on convolutional neural networks (CNNs) and explored methodologies from peer-reviewed research papers.
  - Implemented complex algorithms and methodologies into practical solutions using Jupyter Notebooks and Google Colab
  - Assisted in the publication of papers and surveys covering various topics in machine learning and generative AI.
- May 2021 - **Front-End Developer**, UNIVERSITY OF FLORIDA.  
May 2023
  - Designed user interfaces to streamline the online experience for UF mental health services, improving ease of access for students and faculty.
  - Refactored HTML and CSS styling to combat accessibility issues, achieving a 100% ADA compliance score.
  - Conducted thorough accessibility audits for over 40 department websites to boost site performance and user engagement as measured by SiteImprove analytics.
  - Developed user-centric plugins in PHP, ensuring responsive design continuity and cross-platform compatibility.
- Feb 2021 - **Library Collections Assistant**, UNIVERSITY OF FLORIDA.  
May 2021
  - Provided customer service to patrons, responding to inquiries about the collection and library policies, resulting in a 95% satisfaction rate among patrons.
  - Coordinated and implemented the shifting of collection sections, leading to a 25% increase in available space for incoming materials.
  - Processed materials shifting between in-house and out-of-house collections, ensuring accuracy and efficiency in cataloging for over 1 million items.

Jan 2020 - **Software Engineer Intern**, INFOTECH.

- Apr 2020
  - Partnered with a senior software engineer to implement a Linux operating system in Docker.
  - Programmed over 50 bash scripts to compile system packages which optimized build and compilation time.
  - Identified and patched critical security issues to prevent threats such as buffer overflows and command injections.
  - Contributed to software evaluation processes, recommending optimal application packages and following agile development principles to maintain system integrity.

Aug 2019 - **Engineering IT Tech Support**, HERBERT WERTHEIM COLLEGE OF ENGINEERING.

- Dec 2019
  - Diagnosed and repaired various problems with hardware and computers coming from undergraduate students, graduate students, and faculty members across campus.
  - Remote diagnosing via video chat, running various duties across campus, and doing inventory on necessary supplies for repair.
  - Automated processes and subroutines through writing scripts in Powershell and Python.

## Publications

- Zichong Wang, Jocelyn D., Xiaoyong Yuan, Zhong Chen, Yanzhao Wu, Xin Yao, Wenbin Zhang, "Individual Fairness with Group Awareness under Uncertainty" in *European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases 2024*, Vilnius, Lithuania. March 2024.
- Jocelyn D., Zichong Wang, Wenbin Zhang, "Uncertain Boundaries: Multidisciplinary Approaches to Copyright Issues in Generative AI" in *preprint*. April 2024.

## Projects

Feb 2024 **PolyPaint**.

- Developed a convex polygon rasterizer with multiple customization features using C++ and OpenGL2 for usage on Windows desktop environment.
- Implemented user interface and features with ImGui graphics library.

Mar 2023 **Earrode**.

- Built a cross-platform mobile in React Native, educating users on musical scales and chords.
- Created a modular restful API with Node.js for sound retrieval and implemented user authentication with OAuth2.0.

Mar 2022 **Min-Heap Shopping Bot**.

- Partnered with 3 developers to build a desktop app in C++ to find the best prices for various clothes via queries.
- Implemented graphical user interface using ImGui, SFML, and ImGui-SFML to integrate the two libraries.

Aug 2020 **timmyTTS**.

- Designed a text-to-speech Discord bot that generates mp3 files of speech synthesis in 20 languages, along with detecting and translating languages.
- Developed back-end using Python, Google Translate API, and VoiceRSS API to handle user input.

## Extracurriculars

Sep 2023 - **INIT Build @ FIU**, *Lead Front-End Engineer*.

- Dec 2023
  - Lead design initiatives on a full stack web app that matches prospective roommates within budget and preferences.
  - Transform Figma wireframes into live features using React, TypeScript, and ChakraUI.
  - Coordinate with a 6-member team to enhance user interface and maintain security protocols.

Mar 2022 - **University Film Society**, *Webmaster*.

- Mar 2023
  - Developed a Python Discord bot which facilitated movie and quote searches, and organized weekly film selections for 200+ members.
  - Coordinated over 30 film screenings across UF campus, fostering a vibrant film community.

Apr 2020 - **UF Student Information Security Team**, *Webmaster*.

- Apr 2021
  - Led the creation of a web portal supporting CTF competition training for over 50 members.
  - Revamped the team's website with JavaScript and GitHub Pages, increasing user engagement by 25% in views.