

Michael Tu

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EDUCATION

University of Florida

Gainesville, FL

B.S in Computer Science; GPA: 3.91/4.00

Aug 2021 – May 2025

- **Relevant Coursework:** Operating Systems, Data Structures and Algorithms, Computer Networking, Statistics, Software Engineering, Linear Algebra, Computer Organization, Multimodal Machine Learning

EXPERIENCE

Wells Fargo

Charlotte, NC

Software Engineer Intern

June 2024 – Aug 2024

- Collaborated in an agile environment to support prime brokerage functions, facilitating OTC derivatives trading.
- Automated risk calculation for corporate clients, providing data to daily revise the value of collateral securities.
- Analyzed execution plans in SQL Server to optimize database queries, resulting in a 417% performance increase.
- Parallelized VaR calculation to reduce processing time and improve computing resource allocation.

Lockheed Martin

Dallas, TX

Software Engineer Intern – Active Secret Security Clearance

June 2023 – Aug 2023

- Worked on an agile team to develop embedded software on VxWorks real-time operating system.
- Wrote Ada code for PrSM Increment 1 missile guidance software and integrated it into a CI/CD pipeline.
- Performed HWIL simulation runs and interpreted Wireshark and telemetry data.
- Streamlined test documentation procedure using LaTeX and Git to allow for simultaneous access of documents.

University of Florida

Gainesville, FL

Teaching Assistant: COP3502C – Programming Fundamentals I

Aug 2022 – May 2024

- Conducted office hours and gave weekly lectures to students enrolled in introductory Python programming course.
- Aided instructor in grading and providing feedback on student coursework including exams, labs, and projects.
- Helped develop course content, including programming projects, instructional materials, and study guides.

PROJECTS

City.io

Jan 2023 – May 2023

- Developed an online city-building game written in Go and TypeScript using the Angular framework.
- Designed user interface for login and game components. Ensured functionality of front-end components using Cypress End-to-End tests.
- Collaborated with teammates using Git, assigned issues, and planned sprints to ensure timely delivery of updates.

Deep Guitar

March 2023 – May 2023

- Created a mulitmodal machine learning model, which uses both audio and visual input to identify guitar chords.
- Tracked hand positions using Mediapipe framework and extracted audio features using Librosa library.
- Trained a KNN model and convolutional neural network with visual and audio features to classify chords.
- Utilized late fusion to combine video and audio classifiers, producing a single model with improved performance.

INVOLVEMENT

IEEE UF Student Branch

Gainesville, FL

Media Coordinator

June 2023 – April 2024

- Produced graphics and videos promoting corporate events, technical workshops, socials, and general body meetings.
- Collaborated with fellow board members to plan and organize professional and social events.
- Managed social media accounts to maximize engagement with 800+ members on Instagram and Slack.

SKILLS

- **Languages:** (Proficient) C++, Python, Java, C#, JavaScript/TypeScript, HTML/CSS, SQL, LaTeX (Familiar) MATLAB, R, ARM Assembly, Ada
- **Tools:** Git, Jira, .NET, SSMS, Cypress, Jupyter Notebook

AWARDS

- **University of Florida Dean's List:** College of Liberal Arts and Sciences (Fall 2021 - Spring 2024)