Michael Tu

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EDUCATION

University of Florida

Gainesville, FL

B.S in Computer Science; GPA: 3.95/4.00

Aug 2021 - May 2025

• Relevant Coursework: Data Structures and Algorithms, Software Engineering, Linear Algebra, Discrete Mathematics, Statistics, Programming Fundamentals I/II, Computer Organization, Multimodal Machine Learning

Experience

Lockheed Martin Dallas, TX

Software Engineering Intern - Active Secret Security Clearance

June 2023 - Aug 2023

- \circ Worked on an agile team to develop embedded software, collaborating using Jira and Confluence.
- 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.
- o 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 - Present

- o 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.

WordHunt Solver Oct 2022

- Wrote a C++ app to solve the popular iMessage word puzzle game WordHunt.
- Implemented a backtracking algorithm to find words hidden in a 2D character array. Used a Trie data structure to store dictionary and validate candidate words.

Deep Guitar March 2023 - May 2023

- o Trained a mulitmodal machine learning model, combining audio and visual input to identify guitar chords.
- Tracked hand positions using Mediapipe framework, using finger positions to classify chords in video modality.

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INVOLVEMENT

Filipino Student Association (FSA)

Gainesville, FL

Multimedia Chair

June 2022 – April 2023

- o Produced videos promoting Filipino culture, dance, and on-campus activities using Adobe After Effects.
- Collaborated with fellow board members to plan and organize social events for 300+ students.
- Aided in running first-year involvement program, held meetings to guide students through the process of producing communicative media.

SKILLS

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

AWARDS

- University of Florida Dean's List: College of Liberal Arts and Sciences (Fall 2021 Spring 2023)
- Benacquisto Scholarship: Full ride scholarship awarded to National Merit Scholars