

Michael Tu

Email : mtu4172@gmail.com | Mobile : 813-474-8289 | GitHub : mtu4172 | LinkedIn : mtu4172

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

EXPERIENCE

University of Florida

Gainesville, FL

Teaching Assistant: COP3502C - Programming Fundamentals I

Aug 2022 – Present

- 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.

Lockheed Martin

Dallas, TX

Software Engineering Intern

June 2023 – Aug 2023

- Worked on an software team to develop embedded software and design mission-critical software solutions.

PROJECTS

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.

Minesweeper

April 2022

- Built a C++ app emulating the classic puzzle game, with added functionality including toggleable debug mode.
- Utilized Simple Fast Multimedia Library (SFML) API to support graphics and UI.

Database Research Project

Feb 2021 – May 2021

- Investigated the relationship between query size on relational database performance, comparing speed of full table and index scans. Both clustered and non-clustered indexes stored in B+ trees were tested.
- Used Microsoft SQL Server and T-SQL to evaluate performance on TPC-H benchmark.

INVOLVEMENT

Filipino Student Association (FSA)

Gainesville, FL

Multimedia Chair

June 2022 – April 2023

- 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.

HackGT 8 CTF Challenge

Atlanta, GA

Participant, Rank 16/88

Oct 2021

- Applied knowledge of cybersecurity concepts including cryptography, web exploitation, and reverse engineering to solve challenges for hidden flags.
- Learned to identify software vulnerabilities and use technologies such as SSH and Wireshark.

SKILLS

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

AWARDS

- **National Merit Finalist:** Scored within the 99th percentile on the PSAT
- **University of Florida Dean's List:** College of Liberal Arts and Sciences (Fall 2021 - Spring 2023)