

# Michael Tu

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

## EDUCATION

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### 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

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### 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

*Incoming Software Engineering Intern*

*June 2023 – August 2023*

- Will be working on an agile team to develop embedded software and design mission-critical software solutions.

## PROJECTS

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### WordHunt Solver

*Nov 2021 – Dec 2021, 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

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### Filipino Student Association (FSA)

Gainesville, FL

*Multimedia Chair*

*June 2022 – Present*

- 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

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- **Languages:** (Proficient) C++, Python, Java, MATLAB; (Familiar) SQL, JavaScript, R, ARM Assembly

## AWARDS

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- **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)