

# TUANH CAO

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## Education

### Georgia Institute of Technology

Atlanta, GA

Bachelor of Science in Computer Science

*Expected December 2023*

**Relevant Coursework:** Artificial Intelligence, Probability and Statistics, Applied Combinatorics, Design and Analysis of Algorithms, Discrete Mathematics, Data Structures and Algorithms

## Experience

### Amazon

Seattle, WA

Software Development Engineer Intern

*May 2022-August 2022*

- Designed and implemented backend override for error in shipment forecasting system to decrease forecasting percentage error by over 50% and costs for new shippers by approximately 25%
- Programmed changes within preexisting neural network code, AWS database, and dependent services to fix inaccurate ML model predictions for new shippers who lack shipment history
- Communicated within team during daily standup to develop an all-encompassing high level design
- Collaborated across a different team to approve, authorize, and integrate with their independent service to access data needed to perform the backend override for new shippers

### Georgia Tech College of Computing

Atlanta, GA

Software Developer

*August 2021-December 2021*

- Analyzed preexisting code for homework autograder system, which scores and performs cheat-detection for over 800 students' MATLAB homework code on a weekly basis
- Documented and organized code packages to improve foundation for debugging and future changes
- Reconstructed autograder software from Google-based authorization to Microsoft-based authorization to accommodate for university's new privacy contract

Teaching Assistant

*January 2021-December 2021*

- Collaborated with team of 20 to manage intro level programming course of over 800 students
- Taught MATLAB syntax and foundational coding concepts during 1-1 tutoring and weekly recitation
- Created homework and exam questions to evaluate students' coding and problem solving skills
- Debugged code and guided students' thought process to help solve homework coding problems

## Projects

Personal Website

*Ongoing*

- Developed website for personal portfolio using HTML, JavaScript, and CSS on an encrypted DNS
- Designed interface in a clean, aesthetic, and intuitive layout for optimal user experience

Card Generator IOS App

*Ongoing*

- Developed an App which allows users to draw a single random playing card through their IOS device
- Designed a solid and buildable code foundation to expand project upon as a multi-player poker game
- Programmed in Swift and SwiftUI to explore IOS development and maximize potential outreach

Data Visualization

*April 2021*

- Collaborated with team of Teaching Assistants to develop a final project for students to replicate
- Created project idea of analyzing crime in Atlanta to inform students and promote campus safety
- Implemented a program to plot the locations of crime from 2020 and created graphs of various statistics

## Skills

Programming: Java, C, C++, Python, Assembly, Swift, HTML, JavaScript, CSS, MATLAB

Languages: English – *fluent*, Vietnamese – *fluent*, Spanish – *conversational*

Leadership: Vietnamese Student Association Treasurer

Interests: Piano, Guitar, Dance, Weight Training, Tennis, Volleyball, Travelling