

# David Tanase

(512) 284-6622 | davet.25639@gmail.com | Round Rock, TX 78681 | [www.linkedin.com/in/david-tanase](http://www.linkedin.com/in/david-tanase)

## OBJECTIVE

---

Highly driven computer science student seeking an internship where I would be able to contribute the knowledge that I have learned, develop software that has an impact on real-world problems, and expand my current skillset.

## EDUCATION

---

### Bachelor of Science: Computer Science

May 2025

Texas A&M University, College Station TX

Bachelor of Science in Computer Science

Minor in Mathematics

GPA: 4.00

## EXPERIENCE

---

### Singapore Math Tutoring, Round Rock TX

July 2020 – August 2020

*Software Developer*

- Created custom programs to generate randomized problem sheets, offering students a diverse set of math exercises.
- Included adjustable difficulty options and produced comprehensive answer key PDFs for students to check their work.

### City of Round Rock PARD, Round Rock TX

May 2023 – August 2023

*Lifeguard*

- Worked on a team with other lifeguards, gaining exceptional observational, communication, and decision-making skills to ensure the safety and well-being of all pool patrons.

## PROJECTS

---

### Plant Classification Application (Java)

- Guided a team of three students in the creation of a machine-learning-powered Plant Classification Application for TAMUHack, an annual hackathon at A&M.
- Gained proficiency in using API calls, processing JSON files, and querying an online database to retrieve information.

### Algorithm Development (C++)

- Implemented core computer science algorithms including various forms of sorting, searching, and graph traversals.
- In-depth theoretical knowledge of advanced strategies including greedy, divide and conquer, dynamic programming, NP-completeness, approximation techniques, and randomization.
- Studied proofs of correctness and run-time complexity.

### CSR Graph (Java)

- Designed and implemented a program capable of constructing a Compressed Sparse Row (CSR) graph data structure, providing superior memory efficiency compared to adjacency list and adjacency matrix representations.
- Incorporated Breadth-First Search, Depth-First Search, and Dijkstra's Single Source Shortest Path algorithms to determine the existence of connections between two airports and to determine which flights will help you reach a destination in the shortest distance.

## SKILLS

---

### Advanced Knowledge:

### Intermediate Knowledge:

### Basic Knowledge:

Languages:

C++, Java, Python, Data Structures, Algorithms, GitHub, Cryptography  
C, HDL, SQL, Linux, JSON, Windows API, Excel, HTML, JavaScript, React  
Android SDK, SVG, XML, IBM Quantum Composer, CSS, Bootstrap  
Fluent in English and Romanian. Intermediate knowledge of French.

## HONORS

---

*Dean's List, Fall 2022*

*Craig and Galen Brown Engineering Honors*

*Co-founder and Webmaster of QuantA&M*

*Susan M Arseven '75 Academic Achievement Scholarship*

*Kathy & Brent Smolik Study Abroad Scholarship, Singapore*