

# Derian Hung

Dallas, TX | (469) 288-5725 | [DerianRHung@gmail.com](mailto:DerianRHung@gmail.com) | [LinkedIn](#)

## EDUCATION

**Texas A&M University**, College Station, TX

Graduating May 2027

*B.S. in Computer Engineering, Minors in Cybersecurity & Mathematics*

GPA: 3.36

## TECHNICAL SKILLS

**Languages:** Java, Python, C++, HTML, Verilog

**Programs:** Linux, GitHub, Microsoft Office Specialist 2016

## ACTIVITIES & PROJECTS

### Distributed Networked Banking System

College Station, TX

C++ | TCP/IP Sockets | Multithreading POSIX Signals

August 2025 – December 2025

- Engineered multi-server architecture utilizing TCP/IP sockets and a custom path to facilitate financial transactions and file management
- Developed a high-concurrency engine allowing for thread-safe resource management for parallel tasks
- Utilized POSIX signals to ensure data security and maintain the runtime of a system during network instability.

### Custom Unordered Map Library

College Station, TX

C++ | Hash Functions | Memory Management | Algorithms

January 2025 – May 2025

- Created a custom Unordered Map container in C++ from scratch, utilizing a hash table with separate chaining, prime-based sizing, and custom iterators
- Optimized 'key' operations, such as lookup and deletion, through direct pointer manipulation and traversal
- Designed reusable hashing and collision-resolution algorithms, allowing for faster and more efficient operations

### Traffic Light Emulator

College Station, TX

Embedded Systems | Verilog | Linux | C

August 2024 – January 2026

- Designed and implemented a dual-road traffic light control system within Linux and Vivado on a raspberry pi
- Constructed state diagrams to streamline development of a refined Finite State Machine (FSM)
- Programmed LED-based simulations on embedded hardware to model real-world traffic behavior in a controlled environment, to increase efficiency of light delay

### ASCII Dungeon Simulator

College Station, TX

C++ | Object-Oriented Programming | Game Simulation

January 2024 – May 2024

- Engineered a 2D ASCII-based dungeon game using dynamic memory allocation and custom rendering logic
- Developed modular classes to manage player interactions, map dynamics, and item functionality
- Executed troubleshooting and devised edge case handling to resolve errors and memory leaks

## WORK EXPERIENCE

### Churn and Bake

Plano, TX

*Shift Lead*

June 2022 – June 2023

A newly established bakery and creamery specializing in Asian-inspired frozen desserts and baked goods

- Serviced 250+ customers daily, addressing and resolving customer concerns to ensure a positive experience
- Oversaw front-of-house operations and various company events for the majority of tenure
- Onboarded new team members and created employee guidelines to promote consistency and efficiency

## LEADERSHIP

### Taiwanese American Student Association

College Station, TX

*Vice President External*

June 2024 – Present

- Coordinated campus-wide events and promotional initiatives with multiple external organizations
- Recruited over 300+ new members through strategic online and in-person marketing campaigns and events
- Enhanced non-member engagement by over 50% through targeted outreach efforts