

Theodore Chan

346-429-0963 | tchan@trinity.edu | linkedin.com/in/thchann | github.com/thchann | Portfolio

EDUCATION

Trinity University

Bachelor of Science in Computer Science | GPA: 3.83

San Antonio, TX

Aug 2023 - May 2027

- Relevant Coursework: Data Structures & Algorithms, Database Systems, Object-Oriented Programming

EXPERIENCE

Software Engineer Fellow

HEB

Sept 2025 - Present

Texas

- Engineered a docker containerized vendor submission platform for H-E-B's Quest for Texas Best competition, enabling 600+ vendors to register, upload applications, and track submissions through integrated FastAPI, PostgreSQL, and React services.
- Implemented JWT authentication, bcrypt encryption, and email verification, achieving 5-second verification times and enabling one-minute environment setup through Docker and Flyway-tracked migrations.
- Integrated Jira, Confluence, and GitLab CI/CD to automate deployment tracking, streamline Agile sprint cycles, and ensure consistent documentation across releases.

Machine Learning Research Assistant

Trinity University

May 2025 - August 2025

Texas / Remote

- Implemented a multimodal Transformer for classroom engagement prediction, improving validation accuracy to 79% (65% baseline) by fusing MARLIN embeddings and OpenFace features on 9k+ DAiSEE videos.
- Developed the real-time Transformer model in a real time engagement system, achieving 70% validation accuracy at 30-60 FPS via optimized MediaPipe, now implemented at George Mason University.

Software Engineer Intern

ZACD Group

Mar 2022 - Jun 2022

Singapore

- Engineered a PHP/MySQL dashboard that ingested 20k+ property records each quarter, supporting real-time search, filtering, and ranking by any performance metric, replacing manual Excel workflows.
- Presented algorithm updates to the COO in monthly sprint reviews, translating large-scale property performance data into automated growth analytics that informed quarterly market strategy.

PROJECTS

Lyнк – RowdyHacks 2025 Winner | [Devpost](#) | *SwiftUI, FastAPI, Railway*

- Led frontend architecture and SwiftUI development for a real-time identity-exchange app using Apple's Multipeer Connectivity to synchronize data between paired devices with 1s latency and 3s end-to-end transfer time.
- Deployed FastAPI backend on Railway with Auth0 authentication and MongoDB persistence, enabling real-time "tap-to-share" identity exchanges between iPhones.

Revel | *React Native, TypeScript, FastAPI, MongoDB, Auth0*

- Built a full-stack social event app enabling real-time event creation, discovery, and friend connection.
- Integrated Auth0 for secure login and FastAPI combined with MongoDB backend supporting 300 ms API latency.

LEADERSHIP EXPERIENCE

Vice President/Outreach Chair

Computer Science Internship Preparation

May 2025 - Present

Texas

- Coordinating peer-led programs on LeetCode, DS&A, and technical interview prep for 30+ students.

TECHNICAL SKILLS

Languages: Python, JavaScript, C, SQL

Frameworks & Libraries: React, Node.js, FastAPI, PyTorch

Systems & Networking: Linux, TCP/IP, REST APIs

Tools & Platforms: Git, Docker, AWS, GCP, PostgreSQL, MongoDB