

# CHUN-JU TAO

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## EDUCATION

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- New York University**, New York, NY May 2026  
MS in Computer Engineering, GPA 3.83  
Relevant Coursework: Human Computer Interaction, Machine Learning, MLOps
- National Taichung University of Science and Technology (NTCUST)**, Taichung, Taiwan June 2023  
BEng in Computer Science and Information Engineering (CSIE), GPA 3.79  
Relevant Coursework: Software Engineering, Electronic Commerce Security, Algorithms, Data Structures

## SKILLS

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**Languages:** Python, JavaScript (React, Vue), Java (Android), Go, Swift, MS SQL, PostgreSQL, C#, C  
**Computer Software and OS:** PyCharm, AWS ECS, Docker, Xcode, pgAdmin, Git, macOS, Linux

## PROFESSIONAL EXPERIENCE

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- Software Developer*, **CARITY AI**, Ontario, Canada May 2024 - August 2024
- Analyzed and containerized 4 microservices of an existing LLM pipeline product and developed a DevOps workflow with Docker, GitHub Actions, and AWS ECS for automatic deployment, auto-scaling, service down protection, and saving operational costs by 40%
  - Conducted research in implementing Agentic RAG with LlamaIndex into an existing project, expected to reduce token usage by up to 5 times, improving model efficiency and reducing operational costs, and provide complex question-answering capabilities
- Software Engineering Intern*, **MoBagel**, Taichung, Taiwan January 2023 - July 2023
- Collaborated with an existing team to develop a full-stack material management system for government-owned Taiwan Water Corporation, successfully automated material budgeting and inventory control, efficiently managing assets worth trillions of dollars
  - Established GitFlow and an Agile-like development model for a 10-person team, fostering a culture of collaboration that improved development efficiency and stabilized team management during a 300% expansion
  - Migrated the management system from an outdated Java 4 framework to the .NET framework using C#, Microsoft SQL, and Vue.js for improved performance, scalability, security, and modernized user experience
- iOS Developer in I.M.A.C. Lab*, **NTCUST**, Taichung, Taiwan June 2020 - February 2021  
Advisor: Professor Hung-Ming Chen
- Designed a weather application utilizing Swift UI with MVVM architecture, integrating weather APIs, Realm database for local storage, and MapKit for location-based services
  - Developed a bank application using Storyboards with MVC architecture, incorporating biometric authentication, notification broadcasting, and real-time currency exchange display features
  - Conducted research on hybrid frameworks to bridge SwiftUI limitations, enabling seamless integration of both new and legacy frameworks

## PROJECT

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- Loud Plants in Your Area, **New York University**, New York, NY February 2025 - May 2025  
Advisor: Professor Dishita Turakhia
- Developed a full-stack iOS AR app using Swift, RealityKit, and Reality Composer Pro to visualize real-time plant health, integrating custom sensor data and animated UI overlays.
  - Designed an end-to-end ML pipeline (ScatNet, Morlet wavelets, MFCCs, SVM) to classify plant status from sensor signals, independently implemented and tuned core modules, and collaborated cross-functionally on UI/UX and conducted A/B user studies to validate impact on user behavior and product engagement.

## HONORS

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- Emerging Technology Application Award in Fi-Award 2023 by **the 13th International Conference on Frontier Computing**, Tokyo, Japan 2023
- 1st prize in **Project Competition** at the College of Information and Distribution Science, NTCUST 2023
- Winner of Better Retail, **Level-Up Society Hackathon**, organized by ShowCode 2021