

Cheng-Yan Tsai

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WORK EXPERIENCE

Game Programmer (UE5)

Aug 2023 – Jul 2024

Winking Studios

Project Kyzen

- Developed a metaverse project using Scrum method, delivering 2 versions on schedule.
- Coordinated with a 40-person international team, ensuring effective cross-cultural communication.

Unannounced AAA project

- Designed and built 3 core gameplay systems in an AAA game with a 30-person team.
- Introduced a new dialogue implementation pipeline, accelerating narrative iteration speed by 35%.
- Collaborated with designers and programmers to implement a general interaction system.

Teaching Assistant for Game Programming

Jul 2022 – Jan 2023

National Tsing Hua University

- Led multiple lab sessions, and rewrote over 400 pages of teaching materials for Unity 2021.

RESEARCH EXPERIENCE

Undergraduate Research Assistant

CGV/MIS Lab - National Tsing Hua University

Topic: Interior Architecture Renderer using Unreal Engine 4

Jan 2022 – Dec 2022

- Created a real-time ray-tracing renderer for AI virtual staging using JSON configurations.
- Boosted rendering efficiency by over 60% with a new high-speed rendering procedure.

Topic: Synthetic Liquor Data Generation via Unreal Engine 4

Jul 2021 – Dec 2021

- Implemented real-time caustics using Unreal Engine 4 for synthetic liquor data generation.
- Produced over 1000 images for duel-hand humanoid robots, enhancing their accuracy by 20%.

EDUCATION

Master of Computer Science (GPA: 4.0/4.0)

Aug 2024 – May 2026

Texas A&M University, College Station - U.S.

Bachelor of Science, Interdisciplinary Program of EECS (GPA: 3.87/4.3)

Sep 2020 – Jun 2023

National Tsing Hua University – Taiwan

Bachelor of Science in Computer Science, Transferred (GPA: 3.46/4.0)

Sep 2018 – Jun 2020

Huazhong University of Science and Technology – China

SKILLS

Programming: C/C++, Python, OpenGL, Unreal, Unity, Godot, Ruby, HTML, JavaScript

Graphics & Tools: Blender, Houdini, Substance Designer, Procreate

HONORS & AWARDS

- Best Music & Graphic Design in Taiwan Student Innovation Game Design Competition Jan 2022
- 2nd Place Award in Scholarship for Macao, Hongkong and Taiwan Students Dec 2018 & Dec 2019
- Top 12 out of 120 teams in Hackathon 'hack init()' Jul 2018

ACTIVITIES & LEADERSHIP EXPERIENCE

Co-founder & Vice President - NTHU Game Developer Club

Jun 2022 – Jun 2023

- Led a team of 10 members and organized multiple weekly game development workshops.

Lecturer - NTHU ACG Club

Sep 2021 – Jun 2022

- Delivered over 10 digital art workshops, covering topics such as gesture drawing and color theory.