# 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

#### **Graduate Research Assistant**

Feb 2025 - Present

Soft Interaction Lab – Texas A&M University

• Developing a touch input interface, facilitating scene blocking and staging for virtual production.

#### **Undergraduate Research Assistant**

Jul 2021 – Dec 2022

CGV/MIS Lab - National Tsing Hua University

- 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.
- Produced over 1000 synthetic images for dual-hand humanoid robots, enhancing their accuracy by 20%.

## **EDUCATION**

Master of Computer Science (GPA: 4.0/4.0) Texas A&M University, College Station - U.S.	Aug 2024 – May 2026
<b>Bachelor of Science, Interdisciplinary Program of EECS</b> (GPA: 3.87/4.3) National Tsing Hua University – Taiwan	Sep 2020 – Jun 2023
<b>Bachelor of Science in Computer Science, Transferred</b> (GPA: 3.46/4.0) Huazhong University of Science and Technology – China	Sep 2018 – Jun 2020

## **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.