# Chung-Ho (Kenneth) Wu

(+886)908-411-239 | kkennethwu@gmail.com | Website | GitHub | Linkedin

#### **EDUCATION**

## National Yang Ming Chiao Tung University

Hsinchu, Taiwan

M.S. in Multimedia Engineering. Advisor: Yu-Lun Liu.

Sep 2023 - Present

 $Courses:\ XR\ Camp,\ Deep\ Learning,\ Perception\ and\ Decision\ Making\ in\ Intelligent\ Systems,\ Image\ Processing,\ Video\ streaming$ 

and tracking, Computer Animation and Special Effects, Parallel Programming.

## National Yang Ming Chiao Tung University

Hsinchu, Taiwan

**B.S.** in Computer Science.

Sep 2019 - June 2023

## **PUBLICATIONS**

FrugalNeRF CVPR2025

 ${\it Chung-Ho~Wu*,~Chin-Yang~Lin*,~Changhan~Yeh,~Alex~Yen,~Cheng~Sun,~Yu-Lun~Liu} \qquad {\it Model~Acceleration,~Memory~Efficient}$ 

• Proposed a 3D scene reconstruction method from sparse input images, achieving state-of-the-art quality. Significantly outperformed existing approaches with a 10x improvement in training times, while eliminating the need for pre-trained priors such as monocular depth.

#### AuraFusion360

CVPR2025

Chung-Ho Wu\*, Yang-Jung Chen\*, Ying-Huan Chen, Jie-Ying Lee, Bo-Hsu Ke, Chun-Wei Tuan Mu, Yi-Chuan Huang, Chin-Yang Lin, Min-Hung Chen, Yen-Yu Lin, Yu-Lun Liu

 $Diffusion, \ 3DGS$ 

• Proposed a novel 360° unbounded scene inpainting method leveraging depth-aware Gaussian Splatting and diffusion priors to achieve high-quality object removal with geometric accuracy and multi-view consistency.

#### EXPERIENCE

#### AI Software intern

April 2024 – Oct 2024

Qualcomm

Python, C++, LangChain

- Studied the process of converting Python frontend models to formats compatible with company chips.
- Explored the use of PvBind to integrate Pvthon with C++ for converting Pvthon frontend to C++ IR.
- Developed an scalable ticket analysis pipeline using LangGraph and LLMs to summarize ticket-related code diffs, enabling quick understanding of issues and solutions by linking ticket numbers to relevant code changes
- Contributed to the company's internal LLM framework, successfully merged into the main codebase.

### 3D Modeling Intern

May 2023 – Aug 2023

ITRI

Python, PyTorch, NerfStudio

- Contributed to high-quality 3D reconstructions for online shopping products, incorporating AI techniques.
- Researched and implemented methodologies for the transformation from the Neural Radiance Field into dynamic meshes and textures with spherical harmonic parameters, integrated into the traditional rendering pipeline.
- Focused on literature review, utilizing Python, PyTorch, and NerfStudio API.

### Projects

## PDM Project: Perception and Decision Making in Intelligent Systems

Sep 2023 - Jan 2024

- Leading a project focusing on SLAM, 3D semantic reconstruction, indoor robot navigation, and robot manipulations framework.
- Key areas of expertise include Robotics, Computer Vision, Python, PyTorch, OpenCV, and Open3D.

# Boosting Zero-shot text-prompt segmentation

Sep 2023 - Jan 2024

- Design and boosting details of zero-shot text-prompt segmentation utilized Fast Bilateral Solver.
- 1st place in NYCU Digital Image Processing water segmentation challenge.

# Under The Lake: VR Horror Immersive Experience (XR-Showcase Silver Award) Apr 2023 - June 2023

- Led the design and implementation of "Under the Lake," a VR Horror Immersive Experience.
- Focused on utilizing SteamVR API, Unity, and C# scripting for scene mechanisms.

#### **Expiration Reminder Service**

Oct 2022 - Dec 2022

- Provide an expiration reminder service, which could remind the user of the expiration and detect the usage rate, by connecting an IoT box with an iOS app using ThingSpeak.
- Construct the IoT box by Arduino and 3D printing, and detect the item in the box using ML skills to update the corresponding data on ThingSpeak timely.

#### Programming Skills

Programming Languages: C/C++, C#, Python, Pytorch, Onnx, TensorFlow, CUDA, SQL, Swift, HTML, JS.

Tools: Git, Docker, Linux, Shell Script, OpenCV, OpenGL, Open3D, Unity, Latex, Flask, Heroku, LangChain.