# 陳彥合 Yan-He Chen

#### **EDUCATION**

**National Taiwan Normal University** 

September 2020 - July 2022

Master of Computer Science and Information Engineering

**Kaohsiung Medical University** 

September 2014 - June 2018

Bachelor of Healthcare Administration and Medical Informatics

### Work EXPERIENCE

Delta Electronics, Delta Research Center (DRC)

January 2023 - Present

Senior R&D Engineer

- Gaze Direction and Head Posture of Factory Workers
  - Research leader in deep models for pose estimation and gaze estimation, and developed a Python API.
  - Result: accuracy 99%, angle error less than 5 degrees, FPS: 40.
- Abnormal Event Detection on Factory
  - Study the Action Recognition and Abnormal Detection, and use continues image to detect abnormal events.
  - Results: 81% accuracy, continuous improvement.
- Identification of human body balance status
  - Study the knowledge of Pose Estimation and Walking Plan for Biped robot, based on continuous image to recognition balance status.
  - Achieved identification of static and dynamic equilibrium states, and developed APP and Python versions.
- Use speech synthesis models and speech cloning models to generate sounds and use them in existing products.

National Taiwan Normal University, CSIE

September 2022 - January 2023

Research Assistant

- Research self-supervised and Generative models to enhance image recognition with zero-hot learning. This work was published in *Multimedia tools and applications (IF: 3.6) 2024*.

## Student EXPERIMENCE

**National Taiwan University** 

February 2022 - August 2022

- Study on Generalized Zero-Shot Learning image recognition, published in Multimedia Systems 2024 (IF: 3.9),

National Taiwan Normal University

March 2021 - August 2021

- Research on zero-shot learning image recognition, published in ACM ICMR 2021.

Kaohsiung Medical University, Department of Occupational Therapy

October 2017 - June 2018

- Build a computerized attentional testing system for patient rehabilitation, test time reduced by ten minutes.

#### **PUBLICATIONS**

Self-Supervised Learning of Pseudo Classes for Generalized Zero-Shot Fine-Grained Recognition

Yan-He Chen and Mei-Chen Yeh

Multimedia Tools and Applications (IF: 3.6) [paper] 2024

Indirect Visual-Semantic Alignment for Generalized Zero-Shot Recognition

Yan-He Chen and Mei-Chen Yeh

Multimedia Systems (IF: 3.9) [paper][code] 2024

Weakly- and Semi-Supervised Object Localization

Zhen-Tang Huang, Yan-He Chen and Mei-Chen Yeh

IEEE ICASSP [paper] 2023

Text-Enhanced Attribute-Based Attention for Generalized Zero-Shot Fine-Grained Image Classification

Yan-He Chen and Mei-Chen Yeh

ACM ICMR [paper] 2021