

# Jhao-Ting (Jack) Chen

✉ jhaoting@cmu.edu | 🏠 jtchen0528.github.io | 💻 jtchen0528 | ☎ (+886) 905-568-318

## Education

### Carnegie Mellon University

Pittsburgh, US

#### M.S. in Electrical and Computer Engineering

Aug. 2022 - Dec. 2023 (expected)

- Concentration: Software Engineering, AI/ML Systems.
- Ongoing course: 18-613 Introduction to Computer Systems.

### National Tsing Hua University

Hsinchu, Taiwan

#### B.S. in Electrical Engineering, GPA: 3.93/4.30

Sep. 2017 - Jun. 2021

- Received **1** academic excellence award, **3** academic achievement scholarships worth **7,000 USD**.
- Key Courseworks: Operating System, Algorithms, Machine Learning, Web-app Development, Software Engineering.

## Work Experience

### Microsoft

Taipei, Taiwan

#### Software Engineering, R&D Intern

July. 2020 - July. 2021

- Developed high-performance scripts and parallel execution workflows for node-level/rack-level reliability estimation on the **Azure Virtual Machine Series**, with PowerShell, Batch, Python scripts.
- Developed interactive dashboards that holds **500M+ Azure server node records** for instant health inspection.
- Built **100%** automated project-tracking service for **20+** team members, increased the team's productivity.
- Audited **1M+ server logs** across **200+ Azure data centers** through Microsoft SQL server and Kusto.
- Computed precise metrics for Azure server components life-cycle and time-to-failure evaluation with Python scripts.

### Logitech

Hsinchu, Taiwan

#### Picture Analysis and System Development Intern

Mar. 2020 - Jun. 2020

- Analyzed **1000+ photos** of product materials and colors with machine learning and systemized analysis workflows.
- Designed verification and experiments based on the developed system for accurate product material design.
- Developed a full-stack website with Python Flask-app, Nginx and Google Cloud Platform, deployed the analysis system for **50+ CMF team members** in Hsinchu and Shuzo site.

## Research Experience

### Artificial Intelligence & Image Understanding Lab, Academia Sinica

Taipei, Taiwan

#### Research Assistant, Advisor: Prof. Jun-Cheng Chen

May. 2021 - Feb. 2022

- Have extensive hands-on experience with **50M+ images, 5K+ videos, 2K+ audio segments** in **20+ datasets**.
- Conducted rigorous research in Deep Learning and Computer Vision. **1 paper** accepted by **ICASSP 2022**.
- Developed and deployed a multi-modal, video-audio based deepfake detector for **Taiwan National Security Bureau**.
- Designed a baseline for zero-shot text-guided localization without introducing additional training costs.
- Re-implemented *Learning Self-Consistency for Deepfake Detection* (ICCV 2021) proposed by AWS AI. 📄 jtchen0528/PCL-I2G

## Publications

**Jhao-Ting Chen**, H.A. Hsia, C.H. Lin, B.H. Kung, D.S. Tan, J.C. Chen, K.L. Hua. *CLIPCAM: A Simple Baseline For Zero-shot Text-guided Object and Action Localization*. **IEEE ICASSP 2022**. 📄 aiiu-lab/CLIPCAM

## Skills

**Programming** Python, C/C++, JavaScript, Windows PowerShell, Shell/Batch Scripts, SQL, Verilog

**Tools/Frameworks** PyTorch, Tensorflow, Nginx, Node.js, React.js, Git, Amazon Web Service, Google Cloud Platform

**Deep Learning** Computer Vision, Natural Language Processing, Forgery/Deepfake Detection, Object Detection