Jhao-Ting (Jack) Chen

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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 stressing scripts and parallel execution workflows for node-level/rack-level reliability estimation on CPUs, DIMMs and storages in 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 Porcessing, Forgery/Deepfake Detection, Object Detection