Jhao-Ting (Jack) Chen

Education_

Carnegie Mellon University

Pittsburgh, US

M.S. in Electrical and Computer Engineering

Aug. 2022 - Dec. 2023 (expected)

• Concentration: Software Engineering, AI/ML Systems.

National Tsing Hua University

Hsinchu, Taiwan

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

Sep. 2017 - Jun. 2021

- Received academic excellence awards and 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 (1 year)

Jul. 2020 - Jul. 2021

- Designed and Developed high-performance scripts and parallel execution workflows for the **Azure Virtual Machine Series** node-level/rack-level reliability estimation. Built with **PowerShell, Batch, Python scripts**.
- Developed interactive dashboards that holds 500M+ Azure server node records for instant health inspection.
- Audited 1M+ server logs across 200+ Azure data centers through Microsoft SQL server and Kusto.
- Developed log parsers and remote-access scripts for Board Management Controller (BMC) in nodes/racks.
- Built 100% automated project-tracking services for 20+ team members with Python, SharePoint, Power Automate.
- 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 (4 months)

Mar. 2020 - Jun. 2020

- Analyzed **1000+ photos** of product materials with **machine learning** and systemized the 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 system for 50+ CMF team members at Logitech Hsinchu and Shuzo site.

Research Experience _____

Academia Sinica, AIIU Lab

Taipei, Taiwan

Research Assistant (8 months)

May 2021 - Feb. 2022

- · Conducted rigorous research in Forgery Detection, Object Detection and Vision-Transformer models.
- Possesses extensive experience in dataset processing. Processed 50M+ images, 5K+ videos/audio, in 20+ datasets.
- 1 first-authored paper accepted by IEEE ICASSP 2022. Responsible for all experiments, coding, and paper writing.
- Developed and deployed a **multi-modal**, **video-audio based deepfake detector** for Taiwan National Security Bureau.
- Re-implemented Learning Self-Consistency for Deepfake Detection (ICCV 2021) proposed by AWS AI. @jtchen0528/PCL-12G

Publications _

Skills_

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

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

Deep Learning Dataset Processing, Forgery/Deepfake Detection, Object Detection, Face Recognition

Facial Landmark Tracking, Vision-Transformers, Model Deployment