# Yu-Chu Yu

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### **Education**

#### M.S. in Computer Science and Information Engineering

2020/09 - 2022/11

National Taiwan University

- **GPA**: 4.1 / 4.3
- Adivisor: Hsuan-Tien Lin. Computational Learning Lab (CLLab)
- Honor: Master Thesis Award. Taiwanese Association for Artificial Intelligence 2023
- Master Thesis: Semi-Supervised Domain Adaptation with Source Label Adaptation (CVPR'23)

#### **B.S.** in Computer Science and Information Engineering

2016/09 - 2020/06

National Taiwan University

### **Publication**

- [1] **Yu-Chu Yu**, Chi-Pin Huang, Jr-Jen Chen, Kai-Po Chang, Yung-Hsuan Lai, Fu-En Yang, Yu-Chiang Frank Wang. "Select and Distill: Selective Dual-Teacher Knowledge Transfer for Continual Learning on Vision-Language Models". *arXiv preprint*. March 2024. [Paper Link].
- [2] **Yu-Chu Yu**, Hsuan-Tien Lin. "Semi-Supervised Domain Adaptation with Source Label Adaptation". *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*. June 2023. [Paper Link].

# **Experience**

Research Assistant 2023/09 - Present

Vision Learning Lab. Advisor: Prof. Yu-Chiang Frank Wang

- Research on Continual Learning for Vision-Language Models.
- Develop a selective knowledge distillation algorithm [1] to preserve both previously learned knowledge and zero-shot transferability for a VLM throughout the continual learning process.

#### **Machine Learning Engineer**

2022/11 - 2023/09

Deard Taiwan LTD. Manager: Ting-Hsuan Chao

- Design a recommendation system for a Taiwanese forum platform, serving over 15 million users with more than 10,000 posts per day.
- Develop an interactive API to recommend posts to users on-the-fly (< 1.8 sec. for 95% requests) according to their previous behaviours.

## **Research Development Intern**

2021/12 - 2022/06

Microsoft @ Bing Maps & Geospatial Team. Manager: Jason Hong

• Develop an asynchronous web crawler system to automatically evaluate the performance of reverse geocoding services provided by google, bing and tomtom.

#### **Graduate Student Researcher**

2020/09 - 2022/11

Computational Learning Lab. Advisor: Prof. Hsuan-Tien Lin

• Research on Semi-Supervised Domain Adaptation.

• Address Domain Adaptation as a Noisy Label Learning problem. Develop a dynamic algorithm SLA [2] to learn from the noisy source labels and **outperform state-of-the-art algorithms**. (CVPR'23)

# **Teaching**

**Teaching Assistant** 2020 Fall, 2021 Fall

CSIE 5043: Machine Learning. Instructor: Hsuan-Tien Lin

- Help introduce the foundational concepts of machine learning in 600-person class.
- Design assignments, and projects, and hold office hour for answering questions.

Teaching Assistant 2021 Spring

CSIE 1212: Data Structures and Algorithms. Instructor: Hsuan-Tien Lin & Hsin-Mu Tsai

- Help deal with administrative issues to better maintain a 400-person class.
- Provide office hour for debugging, answering questions.

## Award

Master Thesis Award

Taiwanese Association for Artificial Intelligence