

Yu-Hsiang Wang

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Education

National Taiwan University

B.S. IN ELECTRICAL ENGINEERING

Taipei, Taiwan

Sep. 2019 - Present

- **GPA** : overall: 4.09/4.30, major: 4.12/4.30
- **Honors** : Presidential Award (F ' 20)
- **Selected Courses** : Data Structure, Algorithms, Machine Learning, Reinforcement Learning, Computer Architecture, Financial Technology, Intro. to Computer, Linear Algebra, Discrete Mathematics, Signals and Systems, Embedded System, Networking and Multimedia

National Taiwan University

CREATIVITY AND ENTREPRENEURSHIP PROGRAM

Taipei, Taiwan

Sep. 2021 - June. 2022

- **Honors** : **Top Tier** Team Ranking (out of 10 teams)

Research Experience

Computational Machine Learning Lab

RESEARCH ASSISTANT, ADVISOR: PROF. CHO-JUI HSIEH

UCLA

Jun. 2023 - Present

- Proposed the first concept-level uncertainty for Large Language Models, which can be used as a subtle hallucination detector.
- Extracted concepts using GPT-3.5 and calculated uncertainty by measuring the variance of concept scores using a zero-shot classifier pretrained on MNLI dataset.

interdisciplinary Data Science and Signal Processing Lab

UNDERGRADUATE RESEARCH ASSISTANT, ADVISOR: PROF. CHE LIN

National Taiwan University

Sep. 2022 - Present

- Designed type-aware heterogeneous graph autoencoder to facilitate graph augmentation by discarding superfluous edges and incorporating beneficial ones.
- Achieved **SOTA performance** with an F1-score of 0.94 on the ACM dataset, **outperforming benchmark models by 3%** in heterogeneous node classification tasks. (Our paper is still under reviewed by ICASSP 2023)
- Secured an 8-month research funding grant from the National Science and Technology Council.

Computational Finance and Data Analytics Lab

RESEARCH ASSISTANT, ADVISOR: PROF. CHUAN-JU WANG

Academia Sinica

Oct. 2021 - Feb. 2023

- Collaborated with the streaming company KKStream with the aim of constructing fine-grained knowledge graphs.
- Designed entity alignment algorithm integrating probabilistic reasoning (based on the ratio of similar edges) and semantic information (sentence BERT embedding) to merge multiple knowledge graphs.
- Achieved an F1-score of 0.881 on the DWY15k dataset and 0.58 on KKStream's proprietary dataset, marking a **37% improvement**.

Work Experience

CMoney

AI ENGINEER INTERN, SUPERVISOR: DR. JASON CHOU

Taipei, Taiwan

Jun. 2022 - Jun. 2023

- Developed an explainable Knowledge Graph-based Recommendation System to implement personalized push notification for the most popular stock forum in Taiwan.
- Designed **type-aware attention mechanism** by considering the representation of users and relations.
- Obtained an AUROC score of 0.9, **indicating a 10% improvement**, and ultimately yielded an 8.53% click-through rate, indicating a **3.3x performance enhancement**.

TechInvest Ltd.

CO-FOUNDER & CHIEF OPERATING OFFICER

Taipei, Taiwan

Nov. 2021 - June 2022

- Committed to help startups unfamiliar with software development by offering them practical technical advice.
- Engaged in customer relationship management, business development, regulation, and front-end development in Vue.
- Admitted to **2 Accelerator programs** and **Incubator** hosted by NTU TEC.

Extracurricular Activities

Stanford ASES Summit

DELEGATE OF 2023

Stanford University

Apr. 2023

- Selected to be **the only Taiwanese representative** among the top 24 student entrepreneurs worldwide to participate in the ASES Summit held at Stanford University.
- Presented a novel business concept related to the Asia daigou market to the VC panel and achieved a top-three rank in the pitch competition.