# Yi-Li Hsu CV

<u>yiligml@gmail.com</u> | yilihsu.github.io | linkedin.com/in/yilihsu

#### **EDUCATION**

National Tsing Hua University (NTHU)	Hsinchu, Taiwan
Ph.D. in Computer Science (CS)	09/2022 - Present
National Tsing Hua University (NTHU)	Hsinchu, Taiwan
M.S. in Computer Science (CS) GPA: 4.3/4.3	09/2021 - 08/2022
<ul> <li>Received Direct Admission to Ph.D. Program in the second semester</li> </ul>	
Tübingen University	Tübingen, Germany
Exchange Program of Computer Science (CS)	10/2019 - 02/2020
National Tsing Hua University (NTHU)	Hsinchu, Taiwan
B.S in Computer Science (CS)	09/2018 - 06/2021
Major GPA: 3.85/4.3, Advanced GPA: 3.99/4.3	
GRANDS & AWARDS	
President Scholarship (\$800/month for 4 years), National Tsing Hua University, Taiwan	2022
Travel Grant (\$4,000) for attending KDD conference, Academia Sinica, Taiwan	2022
Appier AI and Information Technology Research Award (\$1,600), Appier, Taiwan	2022
TAAI Scholarship (\$1,000), Taiwanese Association for Artificial Intelligence, Taiwan	2022
Outbound Exchange student Scholarship (\$2,500), National Tsing Hua University, Taiwan	2019
TEACHING EXPERIENCE	

Taiwan AI Academy

Taipei, Taiwan

Teaching Assistant of Natural Language Processing Program

06/2022 - 08/2022

- Introduced dependency parsing, constituency parsing and HMM model with Viterbi algorithm
- Led the hands-on coding with python, which includes Parsing, Part-of-Speech tagging with HMM model

**Department of Computer Science, National Yang Ming Chiao Tung University (NYCU)** *Teaching Assistant of Natural Language Processing Course* 

Hsinchu, Taiwan

02/2022 - 06/2022

- Preparing and teaching for the programming homework with python and final program challenge
- Tracking attendance, recording online courses, grading assignments, and calculating grades

## RESEARCH EXPERIENCE

# Natural Language Processing and Sentiment Analysis Lab, Academia Sinica

Taipei, Taiwan

Part-time Research Assistant of Dr. Lun-Wei Ku

07/2021 - Present

- Fake News Explanation Generation
  - o Created a novel method for counterfactual explanations of fake news and obtained 70% of annotated accuracy
  - o Achieved better human preference compared to current existing summarization-based explanations

#### Computer Systems Lab, Academia Sinica

Hsinchu, Taiwan

Undergraduate Research Assistant of Dr. Yuan-Hao Chang

07/2018 - 06/2021

- Optimization of non-volatile memory
  - o Investigated on optimization of non-volatile memory storage architecture with hashing
  - o Reduced the insertion failure of Cuckoo by 60% and increased the success rate by 25%

### **PUBLICATIONS**

1. Ask to know more: Generating Counterfactual Explanations for Fake Claims. **Yi-Li Hsu\***, Shih-Chieh Dai\*, AiPing Xiong, Lun-Wei Ku. *The 28<sup>th</sup> ACM SIGKDD Conference on Knowledge Discovery and Data Mining (SIDKDD'22) (Oral)* \*equally contributed

#### WORK EXPERIENCE

Commerce Connector Taipei, Taiwan

*Data Engineer Intern* 06/2020 – 2021/05

- Maintained and enhanced crawling system structure with python to improve overall performance
- Crawled product information from a variety of retailer platform's with Scrapy and Selenium
- Assisted in manage all crawling projects with Amazon Web Services

## National Tsing Hua University – Institute of Service Science

Software Engineer Assistant

Hsinchu, Taiwan

03/2020 - 08/2020

- Coordinated with user experience designer and develop a web-based application prototype built in Axure
- Assisted in backend developing, debugging, prototyping and designing in web application with Ruby on rails

Bridgewell Taipei, Taiwan

Data Management Platform Intern

07/2019 - 09/2019

- Analyze millions of user preferences with cookies in order to give commercial strategy suggestions
- Visualized business statistics with new visualization tools including Matplotlib, Kibana, ElasticSearch

## REFERENCE

Dr. Lun-Wei Ku (lwku@iis.sinica.edu.tw)

Institute of Information Science, Academia Sinica

Relationship: Ph.D.'s advisor, director of the Natural Language Processing and Sentiment Analysis Lab

Dr. Yuan-Hao Chang (johnson@iis.sinica.edu.tw)

Institute of Information Science, Academia Sinica

Relationship: Bachelors' co-advisor, Deputy Director of Institute of Information Science, Academia Sinica

**Dr. Wei-Kuan Shih** (wshih@cs.nthu.edu.tw)

Department of Computer Science, National Tsin Hua University

Relationship: Bachelors' advisor, director of the Real-Time Lab