



Yu-Hung (Edward) Wu

Research Assistant at the institute of Information Science, Academia Sinica



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I'm Currently a research assistant at Academia Sinica. Passionate about Natural Language Processing, Machine Learning, and FinTech. Fully prepared to bring the pro-active learning attitude and unwavering dedication to pursuing professional growth that contribute to my exceptional academic and internship performance.

Education

National Taiwan University of Science and Technology (NTUST), Taipei Sep. 2017 – Jun. 2021

B.S., Computer Science and Information Engineering and also Major in Finance

- Overall GPA: 3.87 | CS Major GPA: 4.03 | Finance Major GPA: 3.86 | last 2 year GPA: 3.96
- Participated in the following under-graduate researches:
 1. BERT-Based Visual Question Answering (VQA) (Advised by Professor Kuan-Yu Chen)
 2. Video Activity Recognition in Sports Videos (Advised by Professor Bi-Ru Dai)
 3. High frequency trading (An interdisciplinary project, Advised by Professor Wei-Zhong Miao)
- I got 4th place in NTUST Computer Science Department Class 2021 Graduate Project Competition.

Work Experiences

Institute of Information Science, Academia Sinica, Taiwan Jun. 2021 – Current

Research Assistant

- Academia Sinica is the leading academic institution, and also the national academy in Taiwan.
- I'm working at the [CKIP Lab](#), which goal is to construct research infrastructures with reusable resources for NLP.

Industrial Technology Research Institute, Taiwan Jul. 2020 – Jun. 2021

Machine Learning Engineer Internship

- Invited to work in the institute due to my outstanding academic performance.
- Responsible for developing a Deep Reinforcement Learning (DRL)-based dialogue system. Our goal is to develop a new way (new agent) to solve dialogue policy learning (based on Q-Learning).
- I also developed an algorithm to evaluate the quality of every target-based conversations.

Teaching Assistant of Data Structures Course, NTUST Aug. 2020 – Jan. 2021

- Become the teaching assistant in my advisor's course since I got "A+" in the course in 2018.
- Designed innovative programming assignments and helped students to solve the problems.

Asia Pacific Machine Intelligence Company (AP-MIC), Taipei Sep. 2018 – Mar. 2020

Software Engineer Internship

- AP-MIC is a business partner with Google, which focuses on developing dialogue engines.
- I have participated in designing the structure of dialogue engines.
- Developed a COVID-19 chatbot, which had reached 82,000 conversation sessions.

Technical Skills

Programming Languages

Python – 3+ years
C++, C – 2+ years
JavaScript, HTML, CSS – 2+ years
Node.js – <1 year
R – <1 year

Natural Language Processing

BERT and its applications
seq2seq applications
Transformer
Chinese Processing
Intent Classification

ML / Data Analysis Modules

RNN / CNN / GAN models
Tensorflow2, Keras
Numpy
Sklearn
Pandas

Full-stack Development

Django
Flask
Angular 6

Version Control

Git
Docker

Other

Web Crawler
Database Management
API Design

Competition Experiences

Post Office Big Data Competition - Reached the Semifinals

Apr. 2019 – Jun. 2019

E-sun Tbrain NLP Competition – 5th place (409 participants in total)

Jun. 2020 – Aug. 2020

Leadership Experiences

- Representative of computer science department in freshman orientation.
- Class representative in junior year.
- Team leader of course projects in full-stack development course, operating system course and software engineering course.

Languages

- Mandarin (native)
- English (fluent)
- Japanese (novice)