YEN-HSIANG WANG

Research Interest

Natural Language Processing

Education

National Chung Hsing University

M.S. in Computer Science. Advisor: Yao-Chung, Fan

Fu Jen Catholic University

B.S. Computer Science and Information Engineering.

Sep. 2020 - Sep. 2022

Taichung City, Taiwan

Sep. 2016 – Jun. 2020

New Taipei City, Taiwan

Publications

Conference/Journal Papers

(† indicates equal contribution.)

- 1 Yen-Hsiang Wang, Feng-Dian Su, Tzu-Yu Yeh, Yao-Chung Fan. A Cross-Lingual Statutory Article Retrieval Dataset for Taiwan Legal Studies In ROCLING 2024.
- 2 You-Cheng Liao, Chen-Jui Yu, Chi-Yi Lin, He-Feng Yun, **Yen-Hsiang Wang**, Hsiao-Min Li, Yao-Chung Fan. Learning-From-Mistakes Prompting for Indigenous Language Translation In ACL LoResMT 2024.
- 3 Xingdi Yuan, Tong Wang, **Yen-Hsiang Wang**[†], Emery Fine, Rania Abdelghani, Pauline Lucas, Hélène Sauzéon, Pierre-Yves Oudeyer. Selecting better samples from pre-trained LLMs: a case study on question generation *In Findings of ACL 2023*.
- 4 Rania Abdelghani, **Yen-Hsiang Wang**, Xingdi Yuan, Tong Wang, Pauline Lucas, Hélène Sauzéon, Pierre-Yves Oudeyer. GPT-3-driven pedagogical agents to train children's curious question-asking skills *In International Journal of Artificial Intelligence in Education*.

Tutorial

• ROCLING 2024 "Mastering Retrieval-Augmented Generation: Unlocking Advanced Retrieval Techniques," [Website and Slide]

Work Experience

National Chung Hsing University Natural Language Processing Lab

Jan. 2024 – Recent

Research Assistant

Taichung, Taiwan

- Researching on extremely low-resource machine translation, exploring how LLMs can enhance translation for Indigenous languages by leveraging Chain-of-Thought reasoning by giving relevant pattern by sentence retrieval. [LoResMT ACL'24]
- Proposed a universal method for generating a synthetic legal QA dataset and validating the performance of Sparse embedding, Dense embedding, and LLM query expansion in legal domain retrieval. [Github link]
- Building a retrieval augmentation generation application for agricultural domain question-answering, focusing on retrieval and re-ranking methods to enhance accuracy. [Shennong-TAIDE].

EmotiBot

Jun. 2023 – Dec. 2023

 $Machine\ Learning\ Engineer$

Taipei, Taiwan

• Responsible for the Al applications development of intelligent customer support utilizing Large Language Models (LLM) and Retrieval-Augmented Generation (RAG) architecture.

Inria, National Institute for Research in Digital Science and Technology

Mar. 2022 - Sep. 2022

Research Engineer Intern

France

- Exploring the Educational application of large language models (LLMs) to automate the generation of diverse content to foster curiosity-driven questions among elementary students, reducing the need for manual intervention. [IJAIED]
- Researching on Question Generation Sampling and Evaluation of large language models. [ACL'23]

Industrial Technology Research Institute

Jul. 2021 – Aug. 2021

 $Software\ Engineer\ Intern$

Hsinchu, Taiwan

- Training Transformer-based model for Legal Judgement Question-Answering.
- Development of Manual Annotation System for Data Labeling.

Awards

Best Paper Nominee | ACLCLP

Nov. 2024

• Construct a Cross-Lingual Retrieval Dataset in the Legal domain and provide multiple baseline methods.