

RESEARCH INTEREST

Natural Language Processing

- Summarization, Information Extraction

Generative AI

- Large Language Models, Large Reasoning Models

Machine Learning

- Graph Learning, Representation Learning

EDUCATION

University of Hawaii at Manoa

- Ph.D. Student in Computer Science, Information and Computer Sciences Department

Hawaii, USA

Aug. 2024–Present

- Advisor: Haopeng Zhang

Nanyang Technological University

- M.Eng. in Computer Science, College of Computing and Data Science

Singapore

Aug. 2022–Jul. 2024

- Advisor: Siu Cheung Hui

Hefei University of Technology





- B.Sc. in Mathematics and Applied Mathematics, School of Mathematics

Hefei, China



Aug. 2018–May 2022

PUBLICATIONS

(* denotes equal contribution)

- [C1] **Haohan Yuan**, Haopeng Zhang, “DomainSum: A Hierarchical Benchmark for Fine-Grained Domain Shift in Abstractive Text Summarization”. In *Findings of the 2025 Annual Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics*. (NAACL 2025) 
- [C2] **Haohan Yuan**, Siu Cheung Hui, Haopeng Zhang, “A Structure-aware Generative Model for Biomedical Event Extraction”. In *The 30th International Conference on Database Systems for Advanced Applications (DASFAA 2025)* 
- [C3] Yili Ren*, Haopeng Zhang*, **Haohan Yuan**, Jingzhe Zhang, and Yitong Shen, “Wi-Chat: Large Language Model Powered Wi-Fi Sensing”. In *Proceedings of the 23rd ACM International Conference on Mobile Systems, Applications, and Services (MobiSys 2025) -Posters*, ACM. 
- [J1] Anran Hao*, **Haohan Yuan***, Siu Cheung Hui, Jian Su, “Effective type label-based synergistic representation learning for biomedical event trigger detection”. In *BMC Bioinformatics* (2024) 

PREPRINTS

- [P1] **Haohan Yuan**, Haopeng Zhang, “Understanding LLM Reasoning for Abstractive Summarization”. *In submission* 
- [P1] **Haohan Yuan**, Sukhwa Hong, Haopeng Zhang, “StrucSum: Graph-Structured Reasoning for Long Document Extractive Summarization with LLMs”. *In submission* 

HONORS AND AWARDS

Hawaii Data Science Institute AI @ HIDSIFellowship

2025

PROFESSIONAL SERVICE

Conference Reviewer and Program Committee Member

- AAAI 2026, NewSumm 2025 (EMNLP Workshop)

Conference Volunteer

- NAACL 2025

PROFESSIONAL EXPERIENCE

- **SPIRIT Laboratory, Nanyang Technological University/Singapore Food Agency** **Singapore**
Research Assistant *Jan. 2024–Apr. 2024*
 - Developed a prototype framework for extracting pathogen information from a large corpus of crawled PubMed papers based on large language models.
- **SPIRIT Laboratory, Nanyang Technological University/Singapore Food Agency** **Singapore**
Software Engineering Assistant *Oct. 2022–Apr. 2023*
 - **Full-stack Development:** Developed an online food safety news event monitoring system to track and assess food safety risks. Tech stack: Python, Django, JavaScript, Vue, Element UI, and Elasticsearch.
- **iFLYTEK CO.LTD.** **Hefei, China**
Data Science Engineer Intern *Sep. 2021–Dec. 2021*

SKILLS

- **Programming**
Python, JavaScript, Vue, Matlab
- **Tools**
PyTorch, Transformers, Huggingface, OpenAI API, Django, Element UI, ElasticSearch