

Education

- Queen's University**, Canada Sep 2019 - present
Ph.D in Electrical and Computer Engineering
Advisor: Prof. Xiaodan Zhu
- Peking University**, China Sep 2014 - Jun 2018
B.S. in Computer Science

Research Interests

I have broad interests in the problems related to Natural Language Processing. I am particularly interested in the methods on how to exploit the data more efficiently for challenging NLP tasks.

Publications

1. Interpretable Low-Resource Legal Decision Making
Rohan Bhambhoria, **Hui Liu**, Samuel Dahan, Xiaodan Zhu
AAAI 2022 AI for Social Impact Track, full paper
2. Unsupervised Conversation Disentanglement through Co-Training
Hui Liu, Zhan Shi, Xiaodan Zhu
EMNLP 2021, long paper
3. Retrieval, Analogy, and Composition: A framework for Compositional Generalization in Image Captioning
Zhan Shi, **Hui Liu**, Martin Renqiang Min, Christopher Malon, Li Erran Li, Xiaodan Zhu
Findings of EMNLP 2021, long paper
4. Descriptive Image Captioning with Salient Retrieval Priors
Zhan Shi, **Hui Liu**, Xiaodan Zhu
Canadian Conference on Artificial Intelligence 2021, long paper
5. Enhancing Descriptive Image Captioning with Natural Language Inference
Zhan Shi, **Hui Liu**, Xiaodan Zhu
ACL-IJCNLP 2021, short paper
6. Partner Matters! An Empirical Study on Fusing Personas for Personalized Response Selection in Retrieval-Based Chatbots
Jia-Chen Gu, **Hui Liu**, Zhen-Hua Ling, Quan Liu, Zhigang Chen, Xiaodan Zhu
SIGIR 2021, full paper
7. Improving Pretrained Models for Zero-shot Multi-label Text Classification through Reinforced Label Hierarchy Reasoning
Hui Liu, Danqing Zhang, Bing Yin, Xiaodan Zhu
NAACL-HLT 2021, long paper
8. Have You Made A Decision? Where? A Pilot Study on Interpretability of Polarity Analysis Based on Advising Problem
Tianda Li, Jia-Chen Gu, **Hui Liu**, Quan Liu, Zhen-hua Ling, Zhiming Su, Xiaodan Zhu
ICASSP 2021, full paper
9. End-to-End Transition-Based Online Dialogue Disentanglement
Hui Liu, Zhan Shi, Jia-Chen Gu, Quan Liu, Si Wei, Xiaodan Zhu
IJCAI 2020, full paper

10. Towards Explainable NLP: A Generative Explanation Framework for Text Classification
Hui Liu, Qingyu Yin, William Yang Wang
ACL 2019, long paper
11. QuoteRec: Towards Quote Recommendation for Writings
Jiwei Tan, Xiaojun Wan, **Hui Liu**, Jianguo Xiao
ACM Transactions on Information Systems (TOIS), 2018

Experience

Applied Scientist Intern Sep 2022 - Dec 2022
Amazon Search Mission Understanding Team, Palo Alto, California, US

Applied Scientist Intern Jul 2020 - Dec 2020
Amazon Search Query Understanding Team, Palo Alto, California, US

Research Intern Jan 2018 - May 2018
Lenovo AI Lab, Lenovo, Beijing, China

Academic Services

Program Committee:

- 2021: EMNLP
- 2022: AAAI, ACL, ICLR, NeurIPS, EMNLP
- 2023: AAAI, EACL, ACL, ICML, NeurIP

Teaching

1. Teaching Assistant, ELEC 279: Introduction to Object Oriented Programming, Queen's University, Winter 2023
2. Teaching Assistant, ELEC 425: Machine Learning and Deep Learning, Queen's University, Fall 2021
3. Teaching Assistant, CISC/SOFT 423: Software Requirements, Queen's University, Winter 2021
4. Teaching Assistant, ELEC 373: Computer Networks I, Queen's University, Winter 2020
5. Teaching Assistant, ELEC 425/825: Machine Learning and Deep Learning, Queen's University, Fall 2019