# Hui Liu

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#### 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 Advisor: Prof. Xiaojun Wan

#### Research Interests

I am currently interested in low resource language learning and dialogue representation learning. I am also interested in the explainability and interpretability of natural language models.

### **Publications**

1. "Unsupervised Conversation Disentanglement through Co-Training" Hui Liu, Zhan Shi, Quan Liu, Xiaodan Zhu EMNLP 2021, long paper

2. "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

3. "Enhancing Descriptive Image Captioning with Natural Language Inference"

Zhan Shi, **Hui Liu**, Xiaodan Zhu

ACL-IJCNLP 2021, short paper

4. "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

5. "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

6. "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

7. "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

8. "Towards Explainable NLP: A Generative Explanation Framework for Text Classification" Hui Liu, Qingyu Yin, William Yang Wang ACL 2019, long paper

9. "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

Jul 2020 - Dec 2020

Search Science and AI Group, Amazon, Palo Alto, California, US

Research Intern Jan 2018 - May 2018

Lenovo AI Lab, Lenovo, Beijing, China

### **Academic Services**

Program Committee: EMNLP 2021, AAAI 2022

### **Teaching**

- 1. Teaching Assistant, ELEC 425: Machine Learning and Deep Learning, Queen's University, Fall 2021
- 2. Teaching Assistant, CISC/SOFT 423 Software Requirements, Queen's University, Winter 2021
- 3. Teaching Assistant, ELEC 373 Computer Networks I, Queen's University, Winter 2020
- 4. Teaching Assistant, ELEC 425/825 Machine Learning and Deep Learning, Queen's University, Fall 2019