# Hui Liu

## hui.liu@queensu.ca https://layneins.github.io

#### 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, Xiaodan Zhu EMNLP 2021, long paper

2 "Patriaval Analogy and Compositions

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