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

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

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

ACL-IJCNLP 2021, short paper

5. "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

6. "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

7. "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

8. "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

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

 "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, ACL 2022, ICLR 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