# **Hongming ZHANG**

# PERSONAL DETAILS

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 $\frac{Google}{Scholar} \\ \text{https://scholar.google.com/citations?user=i5ETuuQAAAAJ}$ 

# **EDUCATION**

#### Ph.D. Computer Science

Sep 2018-Jul 2021

HKUST

Commonsense Reasoning; Selectional Preference; Coreference Resolution

Supervisor: Prof. Yangqiu Song

## Visiting Ph.D. Computer Science

Feb 2020-Jul 2021

University of Pennsylvania

Open Domain Event Understanding

Supervisor: Prof. Dan Roth

MPhil. Technology, Leadership and Entrepreneurship Sep 2016-Aug 2018

HKUST

Major in Computer Science

#### **BSc.** Electronic Engineering

Sep 2012-Aug 2016

HKUST

Minor in Information Technology

Minor in Entrepreneurship

Cumulative Grade Average: 3.91/4.30

Ranking in major: 3/74

# Exchange Student

Jan 2015- Jun 2015

University of Wisconsin, Madison

# ACADEMIC REWARDS

SENG Academic Award for Continuing PhD students, HKUS	T Sep 2020
Microsoft Research Asia Fellowship, Microsoft	Nov 2019
Tencent Rhino-Bird Scholarship, Tencent	Oct 2019
Hong Kong PhD Fellowship, HK Government	2018-Present
Excellent Research Award, HKUST	Sep 2018
Academic Achievement Medal, HKUST	May 2016
Highest academic award for undergraduates at HKUST	

Highest academic award for undergraduates at HKUST

Dean's List, HKUST 2012-2015

Semester CGA is greater than 3.70.

#### Academic Excellence Award, HKUST

Apr 2014

Keep in the Dean's list at least twice during the preceding three semesters.

# **WORK EXPERIENCE**

#### **NLP Research Intern**

Oct 2018-Jan 2019

Tencent inc., AI Lab, NLP Group, Full-time

Design NLP algorithms to resolve the pronoun coreference task.

#### Summer Intern

Jun 2017-Sep 2017

Tencent inc., Wechat, Data Center, Full-time

Design the multiplexity network embedding algorithm, which is used to predict user's behavior based their past behavior record.

## **INVITED TALKS**

- 1. Event-centric Towards Commonsense Reasoning from the Angle of Eventualities. USC-ISI AI Seminar. Oct 2021. (Incoming)
- 2. Event-centric Natural Language Processing. ACL 2021 Tutorial. Aug 2021.
- Event-centric Towards Commonsense Reasoning from the Angle of Eventualities. Tencent. Jul 2021.
- 4. Event-centric Towards Commonsense Reasoning from the Angle of Eventualities. MILA AI Seminar, Jun 2021.
- 5. Towards Commonsense Reasoning from the Angle of Eventualities. Amazon Research. Apr 2021.
- 6. Event-centric Natural Language Understanding. AAAI 2021 Tutorial. Feb 2021.
- 7. Commonsense Reasoning from the Angle of Eventualities. NLP with Friends. Sep 2020.
- 8. Event-centric Commonsense Reasoning with Structured Knowledge. Microsoft Research Asia. Oct 2019.

#### **PUBLICATIONS**

Haoyu Wang, **Hongming Zhang**, Muhao Chen and Dan Roth. Learning Constraints and Descriptive Segmentation for Subevent Detection. Conference on Empirical Methods in Natural Language Processing (EMNLP). 2021.

Yanai Elazar, **Hongming Zhang**, Yoav Goldberg and Dan Roth . Back to Square One: Bias Detection, Training and Commonsense Disentanglement in the Winograd Schema. Conference on Empirical Methods in Natural Language Processing (EMNLP). 2021.

Xintong Yu, **Hongming Zhang**, Yangqiu Song, Changshui Zhang, Kun Xu and Dong Yu . Exophoric Pronoun Resolution in Dialogues with Topic Regularization. Conference on Empirical Methods in Natural Language Processing (EMNLP). 2021.

Tianqing Fang, Weiqi Wang, Sehyun Choi, Shibo Hao, **Hongming Zhang**, Yangqiu Song and Bin He. Benchmarking Commonsense Knowledge Base Population with an Effective Evaluation Dataset. Conference on Empirical Methods in Natural Language Processing (EMNLP). 2021.

Tianqing Fang, Haojie Pan, **Hongming Zhang**, Yangqiu Song, Kun Xu, Dong Yu. Do Boat and Ocean Suggest Beach? Dialogue Summarization with External Knowledge. Conference on Automated Knowledge Base Construction (AKBC). 2021.

**Hongming Zhang**, Haoyu Wang, and Dan Roth. Zero-shot Label-Aware Event Trigger and Argument Classification. Annual Meeting of the Association for Computational Linguistics (ACL) Findings. 2021.

Qing Lyu, **Hongming Zhang**, Elior Sulem, and Dan Roth. Zero-shot Event Extraction via Transfer Learning: Challenges and Insights. Annual Meeting of the Association for Computational Linguistics (ACL). 2021. (Short Paper)

Xinran Zhao, Esin Durmus, **Hongming Zhang**, and Claire Cardie. Leveraging Topic Relatedness for Argument Persuasion. Annual Meeting of the Association for Computational Linguistics (ACL) Findings. 2021. (Short Paper)

Tianqing Fang, **Hongming Zhang**, Weiqi Wang, Yangqiu Song, and Bin He. DISCOS: Bridging the Gap between Discourse Knowledge and Commonsense Knowledge. The Web Conference (WWW). 2021.

Jiaxin Bai, **Hongming Zhang**, Yangqiu Song, and Kun Xu. Joint Coreference Resolution and Character Linking for Multiparty Conversation. The European Chapter of the Association for Computational Linguistics (EACL). 2021.

Muhao Chen, **Hongming Zhang**, Haoyu Wang, and Dan Roth. What Are You Trying to Do? Semantic Typing of Event Processes. The SIGNLL Conference on Computational Natural Language Learning (CoNLL). 2020.

**Hongming Zhang**, Muhao Chen, Haoyu Wang, Yangqiu Song, and Dan Roth. Analogous Process Structure Induction for Sub-event Sequence Prediction. Conference on Empirical Methods in Natural Language Processing (EMNLP). 2020.

Haoyu Wang, Muhao Chen, **Hongming Zhang**, and Dan Roth. Joint Constrained Learning for Event-Event Relation Extraction. Conference on Empirical Methods in Natural Language Processing (EMNLP). 2020.

Changlong Yu, Jialong Han, Peifeng Wang, Yangqiu Song, **Hongming Zhang**, Wilfred Ng, and Shuming Shi. When Hearst Is not Enough: Improving Hypernymy Detection from Corpus with Distributional Models. Conference on Empirical Methods in Natural Language Processing (EMNLP). 2020.

Changlong Yu, **Hongming Zhang**, Yangqiu Song, Wilfred Ng, and Lifeng Shang. Enriching Large-Scale Eventuality Knowledge Graph with Entailment Relations. Conference on Automated Knowledge Base Construction (AKBC). 2020.

**Hongming Zhang**, Daniel Khashabi, Yangqiu Song, and Dan Roth. TransOMCS: From Linguistic Graphs to Commonsense Knowledge. International Joint Conference on Artificial Intelligence (IJCAI). 2020.

Hongming Zhang\*, Xinran Zhao\*, and Yangqiu Song. WinoWhy: A Deep Diagnosis of Essential Commonsense Knowledge for Answering Winograd Schema Challenge. Annual Meeting of the Association for Computational Linguistics (ACL). 2020.

**Hongming Zhang\***, Xin Liu\*, Haojie Pan, Yangqiu Song, and Cane Wing-Ki Leung. ASER: A Large-scale Eventuality Knowledge Graph. The Web Conference (WWW). 2020.

**Hongming Zhang\***, Jiaxin Bai\*, Yan Song, Kun Xu, Changlong Yu, Yangqiu Song, Wilfred Ng, and Dong Yu. Multiplex Word Embeddings for Selectional Preference Acquisition. Conference on Empirical Methods in Natural Language Processing (EMNLP). 2019.

Xintong Yu\*, **Hongming Zhang**\*, Yangqiu Song, Yan Song, and Changshui Zhang. What You See is What You Get: Visual Pronoun Coreference Resolution in Conversations. Conference on Empirical Methods in Natural Language Processing (EMNLP). 2019.

Nedjma Ousidhoum, Zizheng Lin, **Hongming Zhang**, Yangqiu Song, and Dit-Yan Yeung. Multilingual and Multi-aspect Hate Speech Analysis. Conference on Empirical Methods in Natural Language Processing (EMNLP). 2019.

**Hongming Zhang**, Hantian Ding, Yangqiu Song. SP-10K: A Large-Scale Evaluation Set for Selectional Preference Acquisition. Annual Meeting of the Association for Computational Linguistics (ACL). 2019.

**Hongming Zhang**, Yan Song, Yangqiu Song, Dong Yu. Knowledge-aware Pronoun Coreference Resolution. Annual Meeting of the Association for Computational Linguistics (ACL). 2019.

**Hongming Zhang**, Yan Song, Yangqiu Song. Incorporating Context and External Knowledge for Pronoun Coreference Resolution. North American Chapter of the Association for Computational Linguistics (NAACL-HLT). 2019.

**Hongming Zhang**, Liwei Qiu, Lingling Yi, Yangqiu Song. Scalable Multiplex Network Embedding. International Joint Conference on Artificial Intelligence (IJCAI). 2018

# COMPETITION

#### First Runner-up

Apr 2018

Hackust 2018(Fintech)

The largest hackathon competition in Great China area.

#### ACADEMIC SERVICES

**Journal Reviewer**: Applied Network Science; Computer Science and Language; IEEE Transactions on Neural Networks and Learning Systems; NeuralComputing.

Senior Conference Reviewer: IJCAI'21.

Conference Reviewer: ACL'21; AAAI'21; EMNLP'21; NAACL'21; COLING'20; AACL'20; CIKM'19; NLPCC'19.

Conference External Reviewer: ACL'18-19; AAAI'19; KDD'18; NIPS'18; ICDM'18; CIKM'18.

Others: IJCAI 2019 WebMaster.

## **SKILLS**

Languages Mandarin (native)

English (fluent)

Software Python, Natural Language Processing

Github https://github.com/panda0881