

HAORAN ZHANG

Aspiring Researcher Who Digs Into Data and Teaches Machines

🐙 [windchimeran.github.io](https://github.com/windchimeran)

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EDUCATION

University of Illinois at Urbana-Champaign (UIUC)

📅 Aug 2019 – Present

Master of Science, Information Management

Changsha University of Science & Technology (CSUST)

📅 Jul 2014 – Jun 2018

Bachelor of Science, Computer Science

RESEARCH EXPERIENCE

BLENDER Lab, University of Illinois at Urbana-Champaign

📅 Aug 2019 – Present

RA in Information Extraction (NLP), Supervised by Dr. Heng Ji

Changsha University of Science & Technology

📅 May 2018 – Jun 2019

RA in Relation Extraction (NLP), Supervised by Dr. Daojian Zeng

University of California, Los Angeles

📅 Sep 2016 – Jun 2017

RA in Semantic Segmentation (CV), Supervised by Yajia Yang

PAPERS AND MANUSCRIPTS

(* refers to equal contributions)

EMNLP'20-
Findings

Minimize Exposure Bias of Seq2Seq Models in Joint Entity and Relation Extraction.

Haoran Zhang*, Qianying Liu*, Aysa Xuemo Fan, Heng Ji, Daojian Zeng, Fei Cheng, Daisuke Kawahara and Sadao Kurohashi. Retrieved from [here](#).

AAAI'20

CopyMTL: Copy Mechanism for Joint Extraction of Entities and Relations with

Multi-Task Learning. Daojian Zeng*, Haoran Zhang*, Qianying Liu. Retrieved from [here](#).

Preprint'20

COVID-19 Literature Knowledge Graph Construction and Drug Repurposing Report

Generation. Qingyun Wang, Manling Li, Xuan Wang, Nikolaus Parulian, Guangxing Han, Jiawei Ma, Jingxuan Tu, Ying Lin, Haoran Zhang, Weili Liu, Aabhas Chauhan, Yingjun Guan, Bangzheng Li, Ruisong Li, Xiangchen Song, Heng Ji, Jiawei Han, Shih-Fu Chang, James Pustejovsky, David Liem, Ahmed Elsayed, Martha Palmer, Jasmine Rah, Cynthia Schneider, Boyan Onyshkevych. Retrieved from [here](#).

PROJECTS

Sequence-to-Unordered-Multi-Tree for Joint Extraction of Relations and Entities

EMNLP'20-Findings

- Formulated the output sequence to unordered-multi-tree structure to minimize the model bias of the Seq2Seq model in relation extraction.
- Designed AB-Test to disentangle model bias from data bias.
- Implemented a toolkit containing [5 Models × 2 Datasets] to be open-sourced.

Sequence-to-Sequence for Joint Extraction of Relations and Entities

AAAI'20

- Figured out a linear algebra bug causing underfitting of training set in an ACL2018 paper.
- Based on theoretical analysis, added only one more non-linear layer to fix the bug.
- Yielded 14 and 31 (F1) absolute improvement over baseline on NYT and WebNLG dataset respectively.

COVID-19 Knowledge Graph

Preprint'20

- Built COVID-KG by information extraction.
- Generated drug repurposing report based on COVID-KG automatically.
- Released the KG and visualization tools to help medical research.

Censorship in China

Course Paper for IS543

- Thoroughly analyzed how censorship was designed, implemented, and developed in China.
- Indicated the roles of the government, netizens and tech-companies in the era of censorship.

Controlled Sequence-to-Sequence for Paraphrase Generation

Undergraduate Research

- Using keywords and the source sentence to generate controlled paraphrase.
- generating diverse paraphrases with respect to different keyword sequences.





SKILLS

Programming	Python, Haskell, C++.
Writting	LaTeX, Markdown, HTML.
Data	Data cleaning, data exploration, data visualization.
AI	Deep learning, natural language processing, computer vision.

COMMUNITY

- Gained 360 stars for open-sourced projects on GitHub.
- Co-founded the first machine learning lab in CSUST.
- Led a session in NLP seminar at iSchool, UIUC.

AWARDS

- Best Thesis Award, CSUST  Jun 2018
- Dean's Scholarship for 2015-2017 Academic Years, CSUST  2015 - 2017
- College Scientific Research Reward, CSUST  Apr 2016
- Scholarship for Academic Competition Excellence, CSUST  Sep 2015