# Kai Zhang

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#### **EDUCATION**

The Ohio State University Ohio, USA

Ph.D. in Computer Science and Engineering Aug 2022-May 2027 (Expected)

**Zhejiang University City College** 

Zhejiang, China B.E. in Computer Science and Technology Sept 2016-Jun 2020

• **GPA**: 3.99/4.0 (93.51/100) **Rank**: 1/118

#### **EXPERIENCE**

**OSU NLP Group, Ohio State University** Ohio, USA

Research Assistant; Advisor: Yu Su Aug 2022-Present

STCA Semantics and Knowledge Team, Microsoft Beijing, China

Research Intern; Host: Chongyang Tao and Tao Shen Sept 2022-July 2022

Minds, Machines, and Society Group, Dartmouth College New Hampshire, USA Research Intern; Advisor: Soroush Vosoughi June 2020-Sept 2020

Tsinghua Natural Language Processing Lab (THUNLP), Tsinghua University Beijing, China

Research Assistant; Advisor: Zhiyuan Liu Nov 2019-Mar 2021

City College Artificial Intelligence (CCAI), Zhejiang University City College Zhejiang, China

Research Assistant; Advisors: Lin Sun and Fanwei Zhu Jan 2018-Nov 2019

#### SELECTED PUBLICATIONS

(\* indicates equal contribution, † indicates first student author)

- 1. Kai Zhang, Bernal Jiménez Gutiérrez, Yu Su. Aligning Instruction Tasks Unlocks Large Language Models as Zero-Shot Relation Extractors. In Findings of ACL 2023.
- 2. Kai Zhang, Chongyang Tao, Tao Shen, Can Xu, Xiubo Geng, Binxing Jiao, and Daxin Jiang. LED: Lexicon-Enlightened Dense Retriever for Large-Scale Retrieval. In WWW 2023 (Oral).
- 3. Weicheng Ma, Renze Lou, Kai Zhang, Lili Wang, and Soroush Vosoughi. GradTS: A Gradient-Based Automatic Auxiliary Task Selection Method Based on Transformer Networks. In EMNLP 2021.
- 4. Fanwei Zhu, Yuan Fang, Kai Zhang<sup>†</sup>, Kevin Chen-Chuan Chang, Hongtai Cao, Zhen Jiang, and Minghui Wu. Unified and Incremental SimRank: Index-free Approximation with Scheduled Principle. In TKDE.
- 5. Weicheng Ma\*, Kai Zhang\*, Renze Lou, Lili Wang, and Soroush Vosoughi. Contributions of Transformer Attention Heads in Multi- and Cross-lingual Tasks. In ACL 2021 (Oral).
- 6. Kai Zhang\*, Yuan Yao\*, Ruobing Xie, Xu Han, Zhiyuan Liu, Fen Lin, Leyu Lin, and Maosong Sun. Open Hierarchical Relation Extraction. In NAACL-HLT 2021.
- 7. Yuan Yao, Haoxi Zhong, Zhengyan Zhang, Xu Han, Xiaozhi Wang, Kai Zhang, Chaojun Xiao, Guoyang Zeng, Zhiyuan Liu, and Maosong Sun. Adversarial Language Games for Advanced Natural Language Intelligence. In AAAI 2021.
- 8. Lin Sun\*, Jiquan Wang\*, Kai Zhang, Fangsheng Weng, and Yindu Su. RpBERT: A Text-image Relation Propagation-based BERT Model for Multimodal NER. In AAAI 2021.
- 9. Lin Sun\*, Kai Zhang\*†, Fule Ji, and Zhenhua Yang. TOI-CNN: A Solution of Information Extraction on Chinese Insurance Policy. In NAACL-HLT 2019.

## **PREPRINTS**

1. Tao Shen, Xiubo Geng, Chongyang Tao, Can Xu, **Kai Zhang**, Daxin Jiang. UnifieR: A Unified Retriever for Large-Scale Retrieval. arXiv:2205.11194. 2022.

## **SELECTED HONORS & AWARDS**

WWW 2023 Student Travel Award	2023
Honor for Seeking Truth & Commencement Student Speaker (Top 1), Zhejiang University City College	2020
National Scholarship (Top 1%), Ministry of Education of P.R.China	2019
Chinese College Students Self-Motivated Stars (Top 200 in China), All-China Students' Federation	2019
Merit-based Scholarship (Top 1%), Zhejiang University City College	2017-2019
Zhejiang Province Scholarship (Top 1%), Department of Education of Zhejiang	2017

## **TALKS**

## Aligning LLM Instruction Tasks for Zero-Shot Relation Extraction.

University of Notre Dame NLP Seminar. March 2023

## **SERVICES**

Secondary Reviewer: WSDM'21; NAACL-HLT'21; ACL'21; EMNLP'21

PC Member/ Reviewer: ARR (since 22); CCKS'22; EMNLP'22; AAAI'23; WWW'23; ACL'23; KDD'23;

NeurIPS'23