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)

• **GPA**: 4.0/4.0

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

RESEARCH EXPERIENCE

OSU NLP Group, The Ohio State University

Ohio, USA

Research Assistant; Advisor: Yu Su Aug 2022-Present

STCA Semantics and Knowledge Team, Microsoft
Research Intern; Host: Chongyang Tao and Tao Shen
Mar 2022-July 2022

Minds, Machines, and Society Group, Dartmouth College

New Hampshire, USA

Research Intern; Advisor: Soroush Vosoughi Jun 2020-Sept 2020

THU NLP Group, Tsinghua UniversityResearch Assistant; Advisor: Zhiyuan Liu

Nov 2019-Mar 2021

Nessellen Assistant, Advisor. Zingdan Eld

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, # indicates work (co-)supervised by me.)

1. UnifieR: A Unified Retriever for Large-Scale Retrieval

Tao Shen, Xiubo Geng, Chongyang Tao, Can Xu, Guodong Long, Kai Zhang, and Daxin Jiang In KDD, 2023.

2. Aligning Instruction Tasks Unlocks Large Language Models as Zero-Shot Relation Extractors

Kai Zhang, Bernal Jiménez Gutiérrez, Yu Su In Findings of ACL, 2023.

3. LED: Lexicon-Enlightened Dense Retriever for Large-Scale Retrieval

Kai Zhang, Chongyang Tao, Tao Shen, Can Xu, Xiubo Geng, Binxing Jiao, and Daxin Jiang In WWW (Oral), 2023.

4. GradTS: A Gradient-Based Automatic Auxiliary Task Selection Method Based on Transformer Network

Weicheng Ma, Renze Lou, <u>Kai Zhang</u>, Lili Wang, and Soroush Vosoughi In EMNLP, 2021.

5. Unified and Incremental SimRank: Index-free Approximation with Scheduled Principle

Fanwei Zhu, Yuan Fang, <u>Kai Zhang†</u>, Kevin Chen-Chuan Chang, Hongtai Cao, Zhen Jiang, and Minghui Wu In IEEE TKDE, 2021.

6. Contributions of Transformer Attention Heads in Multi- and Cross-lingual Tasks

Weicheng Ma*, <u>Kai Zhang</u>*, Renze Lou, Lili Wang, and Soroush Vosoughi In ACL (**Oral**), 2021.

7. Open Hierarchical Relation Extraction

<u>Kai Zhang*</u>, Yuan Yao*, Ruobing Xie, Xu Han, Zhiyuan Liu, Fen Lin, Leyu Lin, and Maosong Sun In NAACL-HLT, 2021.

8. Adversarial Language Games for Advanced Natural Language Intelligence

Yuan Yao, Haoxi Zhong, Zhengyan Zhang, Xu Han, Xiaozhi Wang, <u>Kai Zhang</u>, Chaojun Xiao, Guoyang Zeng, Zhiyuan Liu, and Maosong Sun

In AAAI, 2021.

9. RpBERT: A Text-image Relation Propagation-based BERT Model for Multimodal NER

Lin Sun*, Jiquan Wang*, <u>Kai Zhang</u>, Fangsheng Weng, and Yindu Su In AAAI. 2021.

10. TOI-CNN: A Solution of Information Extraction on Chinese Insurance Policy

Lin Sun*, <u>Kai Zhang*†</u>, Fule Ji, and Zhenhua Yang In NAACL-HLT, 2019.

PREPRINTS

1. MagicBrush: A Manually Annotated Dataset for Instruction-Guided Image Editing

Kai Zhang*, Lingbo Mo, Wenhu Chen, Huan Sun, and Yu Su arXiv:2306.10012, 2023.

2. Adaptive Chameleon or Stubborn Sloth: Unraveling the Behavior of Large Language Models in Knowledge Conflicts

Jian Xie*, Kai Zhang*, Jiangjie Chen, Renze Lou, and Yu Su arXiv:2305.13300, 2023.

3. Automatic Evaluation of Attribution by Large Language Models

Xiang Yue, Boshi Wang, <u>Kai Zhang</u>, Ziru Chen, Yu Su, and Huan Sun arXiv:2305.06311, 2023.

4. Is Prompt All You Need? No. A Comprehensive and Broader View of Instruction Learning

Renze Lou, <u>Kai Zhang</u>, and Wenpeng Yin arXiv:2303.10475, 2023.

5. ChatDoctor: A Medical Chat Model Fine-tuned on LLaMA Model using Medical Domain Knowledge

Yunxiang Li, Zihan Li, <u>Kai Zhang</u>, Ruilong Dan, and You Zhang arXiv:2303.14070, 2023.

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

TALK

Aligning LLM Instruction Tasks for Zero-Shot Relation Extraction.

University of Notre Dame NLP Seminar. March 2023

AI TIME Seminar. May 2023

ACL'23 Matching Workshop. Jul 2023

SERVICES

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

PC Member/Reviewer: ARR (since 22); CCKS'22-23; EMNLP'22-23; AAAI'23-24; WWW'23; ACL'23; KDD'23;

NeurIPS'23; ICML'23-ToM