Kai Zhang

Email: drogozhang@gmail.com Personal Website: https://drogozhang.github.io

EDUCATION

Zhejiang University City College

Hangzhou, China Sept 2016-Jun 2020

B.E. in Computer Science & Technology

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

RESEARCH EXPERIENCE

Remote Research Intern. Minds, Machines, and Society Group.

Dartmouth College.

Advisor: Soroush Vosoughi. Google Scholar

June 2020-Sept 2020

Research Assistant. Tsinghua Natural Language Processing Lab (THUNLP).

Tsinghua University.

Advisor: Zhiyuan Liu. Google Scholar

Nov 2019-Mar 2021

Research Assistant. Institute of Artificial Intelligence.

Zhejiang University City College.

Advisors: Lin Sun and Fanwei Zhu

Jan 2018-Nov 2019

WORK EXPERIENCE

Shanghai Fucong Financial Information Service Co., Ltd.

Shanghai, China

AI Intern

Jul 2018- Sept 2018

- Element Tagging on Insurance Policy for automatic Chinese insurance claims
- Heart-Hero: Medical Intelligent Question Answering Systems

SELECTED PUBLICATIONS

(* indicates equal contribution, † indicates first student author, # indicates work (co-)supervised by me.)

- 1. 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.
- 2. Fanwei Zhu, Yuan Fang, **Kai Zhang**†, Kevin Chen-Chuan Chang, Hongtai Cao, Zhen Jiang and Minghui Wu. Unified and Incremental SimRank: Index-free Approximation with Scheduled Principle. In TKDE.
- 3. 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**).
- 4. **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.
- 5. # Jian Xie*, **Kai Zhang***, Lin Sun, Yindu Su and Chenxiang Xu. Improving Social Media NER via Entity Type-Compatible Unknown Word Substitution. In ICASSP 2021.
- 6. #Yutong Wang*, Renze Lou*, **Kai Zhang***, Maoyan Chen and Yujiu Yang. MORE: A Metric Learning Based Framework for Open-Domain Relation Extraction. In ICASSP 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. **Kai Zhang**, Lin Sun and Fule Ji. A TOI based CNN with Location Regression for Insurance Contract Analysis. In IJCNN 2019 (**Oral**).
- 10. Lin Sun*, **Kai Zhang***†, Fule Ji and Zhenhua Yang. TOI-CNN: A Solution of Information Extraction on Chinese Insurance Policy. In NAACL-HLT 2019.

SELECTED HONORS & AWARDS

Honor for Seeking Truth & Commencement Student Speaker (Top 1)	ZUCC, 2020
Outstanding Graduation Thesis (Top 1)	ZUCC, 2020
Special National Scholarship (Top 10 in Zhejiang Province)	Ministry of Education of P.R.China, 2019
National Scholarship (Top 1%)	Ministry of Education of P.R.China, 2019
Chinese College Students Self-Improvement Stars (Top 200 in China)	All-China Students' Federation, 2019
First Class Scholarship for Academic Performance (Top 1%)	ZUCC, 2017-2019
First Class Scholarship for Competition Performance (Top 1%)	ZUCC, 2017-2018
Zhejiang Province Scholarship (Top 1%)	Department of Education of Zhejiang, 2017
First Prize, Collegiate Theoretical Physics Competition (Top 1%)	Department of Education of Zhejiang, 2017
Second Prize, Collegiate Mathematics Competition (Top 5%)	Department of Education of Zhejiang, 2017

RESEARCH FUNDINGS

Research on Nested Named Entity Recognition	Leader; Mar 2019-June 2020
National Innovation Training Program for College Students: 201913021001	2,700 USD
Prediction on User's Music Listening Behavior	Member; Mar 2019-June 2020
National Innovation Training Program for College Students: 201913021002	2,300 USD
GAN based Image Style Transfer System	Leader; July 2018-Oct 2018
National Innovation Training Program for College Students: 201813021002	1,500 USD

SERVICES

External Reviewer: WSDM 2021; NAACL-HLT 2021; ACL 2021; EMNLP 2021.

Teaching Assistant: Data Structure; Search Engine; Data Mining; Data Analysis; Object-Oriented Programming.

Leadership: Co-Founder & Chairman, CCAI at ZUCC.

SKILLS

Programming Languages: Python; Java; C/C++; Matlab; R; Objective-C; LATEX.

Deep Learning Frameworks: PyTorch; TensorFlow.

English (TOEFL): 107 (Reading 29, Listening 28, Speaking 23, Writing 27)