

Kai Zhang

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Personal Website: <https://drogozhang.github.io>

EDUCATION

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|-----------------------------------------------------------|--------------------------------------------------------|
| Zhejiang University City College , Hangzhou, China | Sept 2016-Jul 2020 |
| Bachelor of Engineering in Computer Science | GPA: 3.99/4.0 Major GPA: 4.0/4.0 Rank: 1/118 |

RESEARCH EXPERIENCE

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|----------------------------------------------------------------------------|-----------------------------------|
| 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

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|----------------------------------------------------------------|----------------------------|
| Shanghai Fucong Financial Information Service Co., Ltd. | <i>Shanghai, China</i> |
| <i>AI Intern</i> | <i>Jul 2018- Sept 2018</i> |

- Automatic Identification and Extraction of Insurance Clauses
- Heart-Hero: Medical Intelligent Question Answering Systems

SELECTED PUBLICATIONS

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

1. Lin Sun*, **Kai Zhang***†, Fule Ji and Zhenhua Yang. TOI-CNN: A Solution of Information Extraction on Chinese Insurance Policy. In NAACL-HLT 2019.
2. **Kai Zhang**, Lin Sun and Fule Ji. A TOI based CNN with Location Regression for Insurance Contract Analysis. In IJCNN 2019 (**Oral**).
3. 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.
4. 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.
5. # 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.
6. # 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.
7. **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.
8. 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**).
9. 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.
10. 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.

SELECTED HONORS & AWARDS

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| Honor for Seeking Truth & 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 China, 2019 |
| National Scholarship (Top 1%) | Ministry of Education of 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

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| 1. GAN based Image Style Transfer System | <i>Leader</i> ; July 2018-Oct 2018 |
| National Innovation Training Program for College Students: 201813021002 | 1,500 USD |
| 2. Research on Nested Named Entity Recognition | <i>Leader</i> ; Mar 2019-June 2020 |
| National Innovation Training Program for College Students: 201913021001 | 2,700 USD |
| 3. Prediction on User's Music Listening Behavior | <i>Member</i> ; Mar 2019-June 2020 |
| National Innovation Training Program for College Students: 201913021002 | 2,300 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)