

# Kai Zhang

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## EDUCATION

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<b>Zhejiang University City College</b> , 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: <a href="#">Soroush Vosoughi</a> . <a href="#">Google Scholar</a>	June 2020-Sept 2020
Research Assistant. Tsinghua Natural Language Processing Lab (THUNLP).	Tsinghua University.
Advisor: <a href="#">Zhiyuan Liu</a> . <a href="#">Google Scholar</a>	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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<b>Shanghai Fucong Financial Information Service Co., Ltd.</b>	<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

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

## SERVICES

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**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

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**Programming Languages:** Python; Java; C/C++; Matlab; R; Objective-C;  $\text{\LaTeX}$ .

**Deep Learning Frameworks:** PyTorch; TensorFlow.

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