# Changzhi Sun

Bytedance AI Lab
Phone: (86)13918382480
10th Floor, Building 24, Sanqi, Lvzhou Technology
1999 N.Yishan Rd., Shanghai, China
Email: czsun.cs@gmail.com
Homepage: http://czsun.site

### Research Interests

Extracting structured data from free text.

Explaining black-box model.

Reasoning over structured data or free text.

## Education

Ph.D. Compute Science, East China Normal University, 2019.

B.S. Compute Science, Anhui Normal University, 2014.

# **Publications**

[\*: equal contribution]

#### Under Review

[1]. NAIL: A Challenging Benchmark for Naïve Logical Reasoning Xinbo Zhang\*, Changzhi Sun\*, Yue Zhang, Lei Li and Hao Zhou. Long paper, submitted to ICLR 2022

[2]. Can Pre-trained Models Really Generate Single-Step Textual Entailment? Liping Yuan, Xinbo Zhang, Changzhi Sun, Xiaoqing Zheng and Hao Zhou.

Long paper, submitted to ACL 2022

[3]. E-KAR: A Benchmark for Rationalizing Natural Language Analogical Reasoning

Jiangjie Chen, Rui Xu, Ziquan Fu, Wei Shi, Zhongqiao Li, Xinbo Zhang, **Changzhi Sun**, Lei Li, Yanghua Xiao and Hao Zhou.

Long paper, submitted to ACL 2022

[4]. Few Clean Instances Help Denoising Distant Supervision

Ziyin Huang, Changzhi Sun, Yijun Wang, Yuanbin Wu and Man Lan.

Long paper, submitted to ACL 2022

[5]. Leveraging High-order Interactions for Unified Entity Relation Extraction

Yijun Wang\*, Changzhi Sun\*, Yuanbin Wu, Zhao Zhou, Lei Li and Junchi Yan

Full paper, rejected by AAAI 2022

Changzhi Sun 2

## Proceedings

[1]. Logic-Regularized Reasoning for Interpretable Fact Verification

Jiangjie Chen, Qiaoben Bao, Changzhi Sun, Xinbo Zhang, Jiaze Chen, Hao Zhou, Yanghua Xiao and Lei Li.

Full paper, AAAI 2022

- [2]. Learning Logic Rules for Document-Level Relation Extraction Dongyu Ru, Changzhi Sun, Jiangtao Feng, Lin Qiu, Hao Zhou, Weinan Zhang, Yong Yu and Lei Li. Long paper, EMNLP 2021
- [3]. Probabilistic Graph Reasoning for Natural Proof Generation

  Changzhi Sun\*, Xinbo Zhang\*, Jiangjie Chen, Chun Gan, Yuanbin Wu, Jiaze Chen, Hao Zhou and Lei Li
  Findings, ACL 2021
- [4]. *UniRE: A Unified Label Space for Entity Relation Extraction*Yijun Wang\*, **Changzhi Sun**\*, Yuanbin Wu, Zhao Zhou, Lei Li and Junchi Yan
  Long paper, ACL 2021
- [5]. EnPaR:Enhancing Entity and Entity Pair Representations for Joint Entity Relation Extraction Yijun Wang, Changzhi Sun, Yuanbin Wu, Zhao Zhou, Lei Li and Junchi Yan Long paper, EACL 2021
- [6]. Is "hot pizza" Positive or Negative? Mining Target-aware Sentiment Lexicons Jie Zhou, Yuanbin Wu, Changzhi Sun and Liang He Long paper, EACL 2021
- [7]. Pre-training Entity Relation Encoder with Intra-span and Inter-span Information Yijun Wang, Changzhi Sun, Yuanbin Wu, Junchi Yan, Peng Gao and Guotong Xie Long paper, EMNLP 2020
- [8]. BiGCNN:Bidirectional Gated Convolutional Neural Network for Chinese Named Entity Recognition Tianyang Zhao, Haoyan Liu, Qianhui Wu, Changzhi Sun, Dongdong Zhan and Zhoujun Li Full paper, DASFAA 2020
- [9]. Joint Type Inference on Entities and Relations via Graph Convolutional Networks

  Changzhi Sun, Yeyun Gong, Yuanbin Wu, Ming Gong, Daxin Jiang, Man Lan, Shiliang Sun and Nan Duan
  Long paper, ACL 2019
- [10]. Distantly Supervised Entity Relation Extraction with Adapted Manual Annotations Changzhi Sun, Yuanbin WuFull paper, AAAI 2019
- [11]. Extracting Entities and Relations with Joint Minimum Risk Training
  Changzhi Sun, Yuanbin Wu, Man Lan, Shiliang Sun, Wenting Wang, Kuang-Chih Lee, and Kewen Wu
  Long paper, EMNLP 2018
- [12]. Large-scale Opinion Relation Extraction with Distantly Supervised Neural Network Changzhi Sun, Yuanbin Wu, Man Lan, Shiliang Sun and Qi Zhang Long paper, EACL 2017

Changzhi Sun

# Experience

Bytedance June. 2020 - Present

Group: AI Lab Position: Researcher

Host: Hao Zhou and Lei Li Topic: Deep Reasoning in NLP

East China Normal University Sep. 2014 - Dec. 2019

Group: Natural Language Processing Group

Position: Ph.D candidate

Supervisor: Yuanbin Wu and Shiliang Sun

Thesis: Deep Learning for Joint Entity Relation Extraction

Microsoft Research Asia Dec. 2018 - May. 2019

Group: Natural Language Computing (NLC)

Position: Intern

Host: Yeyun Gong and Nan Duan

# **Academic Activities**

Conference PC member: ARR(ACL Rolling Review), NAACL(2021), AAAI(2022, 2021), ACL(2021, 2020), EMNLP(2021, 2020), COLING(2020).