# Jiangjie Chen

# Research Interests

Devoted to reasoning over natural language and making machines being right for the right reasons. Main interested research topics include:

- Achieving human-like machine reasoning over natural language;
- Building factual, controllable and knowledge-guided natural language generation techniques.

### Education

Fudan University. Ph.D. in Computer Science

2019 - 2024 (estimated)

Knowledge Works Laboratory at Fudan University, Ph.D. Advisor: Prof. Yanghua Xiao.

Fudan University. B.S. in Computer Science (graduated with honor)

2014 - 2019

#### Publications

[\*: Equal Contribution]

# **Proceedings**

- 1. Neighbors Are Not Strangers: Improving Non-Autoregressive Translation under Low-Frequency Lexical Constraints Chun Zeng\*, **Jiangjie Chen**\*, Tianyi Zhuang, Rui Xu, Hao Yang, Ying Qin, Shimin Tao, Yanghua Xiao. Long paper, in: NAACL 2022 (oral).
- 2. 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, in: Findings of ACL 2022.

- 3. FALCON: A Faithful Contrastive Framework for Response Generation in TableQA Systems Shineng Fang, **Jiangjie Chen**, Xinyao Shen, Yunwen Chen, Yanghua Xiao. Long paper, in: DASFAA 2022.
- 4. LoRen: Logic-Regularized Reasoning for Interpretable Fact Verification

**Jiangjie Chen**, Qiaoben Bao, Changzhi Sun, Xinbo Zhang, Jiaze Chen, Hao Zhou, Yanghua Xiao, Lei Li. Regular paper, in: AAAI 2022 (oral).

5. Unsupervised Editing for Counterfactual Stories

Jiangjie Chen, Chun Gan, Sijie Cheng, Hao Zhou, Yanghua Xiao, Lei Li.

Regular paper, in: AAAI 2022 (oral).

6. Diversified Query Generation Guided with Knowledge Graph

Xinyao Shen, Jiangjie Chen, Jiaze Chen, Chun Zeng, Yanghua Xiao.

Long paper, in: WSDM 2022.

7. Harvesting More Answer Spans from Paragraphs beyond Annotation

Qiaoben Bao, Jiangjie Chen, Linfang Liu, Jiaqing Liang, Jingping Liu, Yanghua Xiao.

Long paper, in: WSDM 2022.

8. Diversified Paraphrase Generation with Commonsense Knowledge Graph

Xinyao Shen, Jiangjie Chen, Yanghua Xiao.

Long paper, in: NLPCC 2021 (oral).

9. Probabilistic Graph Reasoning for Natural Proof Generation

Changzhi Sun\*, Xinbo Zhang\*, **Jiangjie Chen**, Chun Gan, Yuanbin Wu, Jiaze Chen, Hao Zhou, Lei Li. Long paper, in: *Findings of ACL 2021*.

- Ensuring Readability and Data-fidelity using Head-modifier Templates in Deep Type Description Generation Jiangjie Chen, Ao Wang, Haiyun Jiang, Suo Feng, Chenguang Li, Yanghua Xiao. Long paper, in: ACL 2019.
- 11. CN-Probase: A Data-driven Approach for Large-scale Chinese Taxonomy Construction
  Jindong Chen, Ao Wang, **Jiangjie Chen**, Yanghua Xiao, Zhendong Chu, Jingping Liu, Jiaqing Liang, Wei Wang.
  Short paper, in: ICDE 2019.

#### Books

1. Knowledge Graph: Concepts and Technologies (Chinese: 《知识图谱·概念与技术》) Yanghua Xiao et al. 2020.

# Experience

# University of California, Santa Barbara (Remote)

Sept. 2021 - Present

• Role: Research Intern

• Host: Prof. Lei Li

• Topics: Natural Language Reasoning

# ByteDance AI-Lab (Shanghai)

• Role: Research Intern

- Advisors: Prof. Lei Li (now at UCSB), Prof. Hao Zhou (now at Tsinghua University), Dr. Changzhi Sun
- Topics: Knowledge-guided Generation, Natural Language Reasoning

### Knowledge Works Lab at Fudan University (Shanghai)

Apr. 2017 - Present

Nov. 2019 - Present

Role: Student ResearcherAdvisor: Prof. Yanghua Xiao

• Topics: Text Generation, Natural Language Reasoning, Knowledge Graph

# Academic Service

 $\bullet\,$  Program Committee/Reviewer of EMNLP (2021, 2022), AAAI (2021-2023), NLPCC (2021, 2022), TPAMI (2022), APIN (2022).