# Jiangjie Chen

**■** jjchen19@fudan.edu.cn · % https://jiangjiechen.github.io · **६** (+86) 158-5705-2999

#### Research Interests

Devoted to reasoning over natural language and making machines being right for the right reasons. Main interested research topics include (but not limited to):

- Machine reasoning, especially on endowing various kinds of human-like reasoning abilities to language models, including analogical reasoning, counterfactual reasoning, decision-making, planning, etc.;
- Text generation, especially on the building of factual, faithful, controllable and knowledge-guided text generation techniques;
- The intersect of machine reasoning and text generation, i.e., achieving machine reasoning with the vehicle of natural language, especially with free-text rationales generated by language models.

## Education

Fudan University (Shanghai). Ph.D. in Computer Science

2019 - 2024 (estimated)

Ph.D. Advisor: Yanghua Xiao.

Fudan University (Shanghai). B.S. in Computer Science (honors student)

2014 - 2019

## Research Papers

[\*: Equal Contribution]

#### **Publications**

- 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. (CN-Probase has achieved near 100 million API calls at http://kw.fudan.edu.cn/cnprobase.)

## Experience

#### University of California, Santa Barbara (Remote)

Sept. 2021 - Present

- Role: Research Intern
- Host: Lei Li
- Topics: Machine Reasoning

#### ByteDance AI-Lab (Shanghai)

Nov. 2019 - Present

- Role: Research Intern
- Advisors: Lei Li (now at UCSB), Hao Zhou (now at Tsinghua University), Changzhi Sun
- Topics: Knowledge-guided Generation, Machine Reasoning

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

Apr. 2017 - Present

- Role: Student ResearcherAdvisor: Yanghua Xiao
- Topics: Text Generation, Machine Reasoning, Knowledge Graph

### Awards

China National Scholarship for Doctoral Students 2022 Honors Student Award in Computer Science of Top Talent Undergraduate Training Program 2019

#### Academic Service

• Program Committee/Reviewer of EMNLP (2021, 2022), AAAI (2021-2023), TPAMI (2022), APIN (2022), WSDM (2023), NLPCC (2021, 2022).