

## Research Interests

(the **bold** denotes the tasks which I am most familiar with)

My research interests lie in Natural Language Processing (NLP) and Machine Learning. I have a broad interest in many NLP tasks. My recent work has focused on Cross-Lingual Summarization [1], Dialogue Summarization [1], Sports Game Summarization [2,4] and Story Generation [3] (see publications). Though most of my publications focus on Natural Language Generation (NLG), I also take interest in many Natural Language Understanding (NLU) tasks, such as machine reading comprehension and question answering (especially multi-hop QA, KBQA and commonsense QA). In my spare time, I also participated in my collaborators' work that spans Knowledge Graph Embedding [6] and Visual Dialogue [7].

## **Education**

#### **Soochow University**

Suzhou, China

MASTER STUDENT, COMPUTER SCIENCE Sept 2020 - Jun 2023 (Expected)

• Advisor: Prof. Zhixu Li (now at Fudan University)

• Ranking: 1/190

**Soochow University** 

Suzhou, China

Sept 2016 - Jun 2020

B.Eng, Computer Science & Engineering

- Thesis Advisor: Prof. Zhixu Li
- GPA: 3.7/4.0 (total), Ranking: 8/200+

# **Publications**

[1] CLIDSUM: A Benchmark Dataset for Cross-Lingual Dialogue Summarization

Jiaan Wang, Fandong Meng, Ziyao Lu, Duo Zheng, Zhixu Li, Jianfeng Qu and Jie Zhou arXiv preprint 2022. [Data&Code]

- We introduce cross-lingual dialogue summarization (XLDS) task and present CLIDSUM, the first large-scale XLDS benchmark dataset.
- We propose the mDIALBART model that extends mBART-50 via the second pre-training stage. Our mDIALBART achieves the state-of-the-art performance on CLIDSUM.
- · We elaborately build and evaluate various baselines of different paradigms and give multiple promising directions for future research.
- [2] Knowledge Enhanced Sports Game Summarization

Jiaan Wang, Zhixu Li, Tingyi Zhang, Duo Zheng, Jianfeng Qu, An Liu, Lei Zhao and Zhigang Chen In Proc. of WSDM 2022 (long paper). [Data&Code]

- We introduce K-SportsSum which is currently the highest quality and largest sports game summarization dataset.
- We propose knowledge-enhanced summarizer (KES) which take the information of knowledge corpus into account when generating sports news.
- Our KES achieves a new state-of-the-art performance on both K-SportsSum and SportsSum datasets.
- [3] Incorporating Commonsense Knowledge into Story Ending Generation via Heterogeneous Graph Networks Jiaan Wang, Beiqi Zou, Zhixu Li, Jianfeng Qu, Pengpeng Zhao, An Liu and Lei Zhao

*In Proc. of DASFAA 2022 (long paper).* [Code]

- We propose a Story Heterogeneous Graph Network for story ending generation. Our model explicitly considers the story context at different granularity levels and the multi-grained interactive relations among them.
- We design two auxiliary tasks to facilitate story comprehension.
- Extensive experiments on widely used ROCStories Corpus show that our model achieves new state-of-the-art
- [4] SportsSum2.0: Generating High-Quality Sports News from Live Text Commentary

Jiaan Wang, Zhixu Li, Qiang Yang, Jianfeng Qu, Zhigang Chen, Qingsheng Liu and Guoping Hu In Proc. of CIKM 2021 (short paper). [Data]

- SportsSum2.0 is the preliminary study of *Knowledge Enhanced Sports Game Summarization*.
- In this work, we present SportsSum2.0 dataset together with a reranker-enhanced summarizer.
- [5] Multi-Modal Chorus Recognition for Improving Song Search

Jiaan Wang, Zhixu Li, Binbin Gu, Tingyi Zhang, Qingsheng Liu, Zhigang Chen

JIAAN WANG · RESUME

In Proc. of ICANN 2021 (long paper). [Code]

- We propose a novel task, i.e., Chorus Recognition, aiming at identifying the chorus of a given song. We model Chorus Recognition as a multi-modal task where both lyrics and tune of songs would be taken into account.
- We construct CHORD, the first chorus recognition dataset.
- We propose a novel multi-modal Chorus Recognition model, i.e., MMCR, which achieves the state-of-the-art performance on CHORD.
- [6] Aligning Internal Regularity and External Influence of Multi-Granularity for Temporal Knowledge Graph Embedding Tingyi Zhang, Zhixu Li, **Jiaan Wang**, Jianfeng Qu, Lin Yuan, An Liu, Lei Zhao and Zhigang Chen In Proc. of <u>DASFAA 2022</u> (long paper).
- [7] Enhancing Visual Dialog Questioner with Entity-based Strategy Learning and Augmented Guesser Duo Zheng, Zipeng Xu, Fandong Meng, Xiaojie Wang, **Jiaan Wang** and Jie Zhou In Proc. of EMNLP Findings 2021 (long paper). [Code]

# **Internships**

WeChat AI, Tencent Inc.

Beijing, China

NLP RESEARCH INTERN (FULL TIME)

2021.09 - Present

- Advised by Dr. Fandong Meng
- Research on cross-lingual summarization [1].

### **Knowledge Works Lab, Fudan University**

Remote

NLP RESEARCH INTERN (PART TIME)

2021.09 - Present

- · Advised by Prof. Zhixu Li
- Research on knowledge graph and sports game summarization [2].

### Fuxi Al Lab, NetEase Game

Hangzhou, China 2021.06 - 2021.09

NLP ENGINEERING INTERN (FULL TIME)

- Work with Cong Zhang, Linjian Zhang, Guanying Wang and Beiqi Zou
- Research on story ending generation [3] and other NLP/IR subtasks that could be used in games to enhance the players' game experience.
- Participate in the intelligent dialogue system of *Justice Online* (a MMORPG PC game) and *Wang Chuan Feng Hua Lu* (a MMO mobile game). Specifically, players can raise "children" in *Justice Online* and chat with their "children" through intelligent dialogue systems. The reply content of "children" can be influenced by age, character, gender, history dialogues, etc. For *Wang Chuan Feng Hua Lu*, players can adopt cats and have conversations with them.

iFLYTEK AI Research Suzhou, China

NLP RESEARCH INTERN (FULL TIME)

2019.10 - 2020.08 & 2021.03 - 2021.06

- Advised by Prof. Zhixu Li
- Research on text summarization, sports game summarization [2,4] and music summarization [5].

## Awards\_

2021.10	National Scholarship, Ranking: 1/190	MOE, China
2020.10	The Grand Prize Scholarship, Ranking: 1/190	Soochow University
2020.06	Excellent Graduates, Top 5%	Soochow University
2019.09	Postgraduate Recommendation Qualification, Ranking: 8/200+	Soochow University
2019	<b>The First-grade Innovation Scholarship</b> , Top 5%	Soochow University
2019	The First-grade Scholarship, Top 10%	Soochow University
2018	The Second-grade Scholarship, Top 25%	Soochow University
2017	The First-grade Scholarship, Top 10%	Soochow University
2015	<b>Provincial First Prize at Chinese Mathematics Olympiad</b> , Ranking: 42nd in Shaanxi province	CMS
2014	<b>Provincial First Prize at Chinese Mathematics Olympiad</b> , Ranking: 16th in Shaanxi province	CMS

## **Skills**

- Languages: Chinese (native), English (familiar), Korean (beginner)
- Programming: Python