

## **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 performances.
- [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

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 DASFAA 2022 (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

2021.09 - Present

NLP RESEARCH INTERN (PART TIME)

· 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