# SIYUAN WANG

## siyuanwangw.github.io

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## **EDUCATION**

**Fudan University** 

Sep 2018 - Oct 2023 Ph.D. Candidate in Statistics (Statistical Machine Learning Direction) (expected)

Advisor: Zhongvu Wei

Focus: Natural Language Processing, Complex Reasoning, Knowledge Modeling

**Fudan University** Shanghai, China

Bachelor of Software Engineering (Data Science Direction) Sep 2014 - Jun 2018

## RESEARCH EXPERIENCE

Fudan University, DISC Research Lab

Shanghai, China

Graduate Research Assistant (Advisor: Zhongyu Wei) Oct 2017 - Present

**Project**: Knowledge Modeling for Question Generation

Flexible Interpretability and Generalizability of Complex Reasoning

University of Southern California, INK Research Lab

Los Angeles, CA

Shanghai, China

Visiting Scholar (Advisor: Xiang Ren)

Jan 2023 - Jun 2023

**Project:** Primitive Logical Rule Base Construction and Inference Engine Training

Langboat Tech Beijing, China

Research Intern (Advisor: Ming Zhou) Feb 2021 - May 2021

**Project**: Neuro-symbolic Exploration for Complex Reasoning

Microsoft Research Asia, Natural Language Computing Group Beijing, China

Sep 2020 - Feb 2021 Research Intern (Advisor: Duvu Tang)

**Project**: Symbolic Logic-driven Logical Reasoning

#### **PUBLICATIONS**

- [1] Siyuan Wang, Zhongyu Wei, Meng Han, Zhihao Fan, Haijun Shan, Qi Zhang, Xuanjing Huang. "Query Structure Modeling for Inductive Logical Reasoning Over Knowledge Graphs." In Proceedings of ACL 2023. Long Paper
- [2] Siyuan Wang, Zhongyu Wei, Jiarong Xu, Taishan Li and Zhihao Fan. "Unifying Structure Reasoning and Language Pre-training for Complex Reasoning Tasks." Preprint
- [3] Siyuan Wang, Zhongyu Wei, Zhihao Fan, Qi Zhang and Xuanjing Huang. "Locate Then Ask: Interpretable Stepwise Reasoning for Multi-hop Question Answering." In Proceedings of COLING 2022. Long Paper [pdf]
- [4] Siyuan Wang, Zhongkun Liu, Wanjun Zhong, Ming Zhou, Zhongyu Wei, Zhumin Chen, Nan Duan. "From LSAT: The Progress and Challenges of Complex Reasoning." In Transactions of TASLP 2022, Long Paper [pdf]

- [5] Siyuan Wang, Wanjun Zhong, Duyu Tang, Zhongyu Wei, Zhihao Fan, Daxin Jiang, Ming Zhou, Nan Duan. "Logic-Driven Context Extension and Data Augmentation for Logical Reasoning of Text." In Findings of ACL 2022. Long Paper [pdf]
- [6] Siyuan Wang, Zhongyu Wei, Zhihao Fan, Zengfeng Huang, Weijian Sun, Qi Zhang and Xuanjing Huang. "PathQG: Neural Question Generation from Facts." In Proceedings of EMNLP 2020. Long Paper
  [pdf]
- [7] Siyuan Wang, Zhongyu Wei, Zhihao Fan, Yang Liu and Xuanjing Huang. "A Multi-Agent Communication Framework for Question-Worthy Phrase Extraction and Question Generation." In Proceedings of AAAI 2019. Long Paper [pdf]
- [8] Wanjun Zhong, **Siyuan Wang**, Duyu Tang, Zenan Xu, Daya Guo, Jiahai Wang, Jian Yin, Ming Zhou, Nan Duan. "**Analytical Reasoning of Text.**" In Findings of NAACL 2022. Long Paper [pdf]
- [9] Tong Liu\*, Siyuan Wang\*, Jingchao Fu, Lei Chen, Zhongyu Wei, Yaqi Liu, Heng Ye, Liaosa Xu, Weiqiang Wang, Xuanjing Huang. "Fine-Grained Element Identification in Complaint Text of Internet Fraud." In Proceedings of CIKM 2021. Short Paper. \*Equal contribution [pdf]
- [10] Jiayu Ding, Siyuan Wang, Qin Chen, Zhongyu Wei. "Reasoning Chain Based Adversarial Attack for Multi-hop Question Answering." Preprint [pdf]

## **TEACHING**

Introduction to Artificial Intelligence (TA), Fudan University Introduction to Algorithm (TA), Fudan University

Spring 2018, 2019, Fall 2019 Fall 2018

## PROFESSIONAL SERVICE

## Co-Organizer

Program Committee Chair of CSSNLP 2021, Organizing Committee of CSSNLP 2020

## Program Committee (Reviewer)

ACL Rolling Review 2021-2023, ACL, AAAI, IJCAI, EMNLP, NAACL, NLPCC, IEEE/ACM Trans. on ASLP(TASLP), ACM Trans. on ALLIP (TALLIP)

## **Invited Talk**

"How to Cope with the Changes Brought about by LLMs?"

"A Brief Probe on Writing an Academic Rebuttal."

CCAC 2023 Student Seminar

CCL 2021 Student Seminar

## AWARDS AND HONORS

## Outstanding Graduates

Outstanding Graduates of Shanghai Jun 2023
Outstanding Graduates of Fudan University Jun 2018

#### Scholarship

MobTech Scholarship	Oct 2022
Outstanding Student Scholarship (Grade 1)	Oct 2021
Outstanding Student Scholarship (Grade 1)	Oct 2020
Bank of Communications Scholarship (Grade 1)	Oct 2019