# Xiaxia Wang (王夏霞)

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#### Short Bio

Currently I am a Ph.D. student of Department of Computer Science in University of Oxford. I work in the Data and Knowledge Group, advised by Prof. Ian Horrocks.

Before that, I achieved my M.S. degree of Computer Technology from Nanjing University in 2022. I worked in Websoft Research Group, supervised by Prof. Gong Cheng and Prof. Yuzhong Qu. I received my B.S. degree of Information and Computing Science from Nanjing University of Aeronautics and Astronautics in 2019.

### Education

University of Oxford

Oct. 2022 - Now

Ph.D. student of Computer Science Supervisor: Prof. Ian Horrocks

Nanjing University

Sept. 2019 - June 2022

M.S. degree of Computer Technology

Supervisors: Prof. Gong Cheng and Prof. Yuzhong Qu

Nanjing University of Aeronautics and Astronautics

Sept. 2015 - June 2019

B.S. degree of Information and Computing Science

GPA: 4.5/5.0, Ranking: 1/70

### Research Interest

My research interests include knowledge graph, neuro-symbolic reasoning, and semantic technologies applied in intelligent systems.

Currently I am interested in combining symbolic rules with neural methods to achieve explainable, effective systems. I have also worked on semantic search algorithms applied in dataset search systems, including data summarization, query analysis, and information retrieval.

## **Publications**

- 1. Xiaxia Wang, Gong Cheng, Jeff Z. Pan, Evgeny Kharlamov, Yuzhong Qu BANDAR: Benchmarking Snippet Generation Algorithms for (RDF) Dataset Search. In IEEE Transactions on Knowledge and Data Engineering 35(2) (TKDE 2023).
- 2. Tengteng Lin, Qiaosheng Chen, Gong Cheng, Ahmet Soylu, Basil Ell, Ruoqi Zhao, Qing Shi, Xiaxia Wang, Yu Gu, Evgeny Kharlamov ACORDAR: A Test Collection for Ad Hoc Content-Based (RDF) Dataset Retrieval.

- In Proc. of the 45th International ACM SIGIR Conference (SIGIR 2022).
- 3. Xiaxia Wang, Tengteng Lin, Weiqing Luo, Gong Cheng, Yuzhong Qu CKGSE: A Prototype Search Engine for Chinese Knowledge Graphs. In Data Intelligence 4(1) (DI 2022).
- 4. Xiaxia Wang, Gong Cheng, Tengteng Lin, Jing Xu, Jeff Z. Pan, Evgeny Kharlamov, Yuzhong Qu PCSG: Pattern-Coverage Snippet Generation for RDF Datasets.

In Proc. of the 20th International Semantic Web Conference (ISWC 2021). With Student Grant.

- Xiaxia Wang, Tengteng Lin, Weiqing Luo, Gong Cheng, Yuzhong Qu
   Content-Based Open Knowledge Graph Search: A Preliminary Study with OpenKG.CN.
   In Proc. of the 2021 China Conference on Knowledge Graph and Semantic Computing (CCKS 2021).
- 6. Xiaxia Wang, Jinchi Chen, Shuxin Li, Gong Cheng, Jeff Z. Pan, Evgeny Kharlamov, Yuzhong Qu A Framework for Evaluating Snippet Generation for Dataset Search.

In Proc. of the 18th International Semantic Web Conference (ISWC 2019).

7. **Xiaxia Wang**, Gong Cheng, Evgeny Kharlamov Towards Multi-Facet Snippets for Dataset Search.

In Proc. of the 6th International Workshop on Dataset PROFILing and Search (PROFILES 2019).

8. Jinchi Chen, **Xiaxia Wang**, Gong Cheng, Evgeny Kharlamov, Yuzhong Qu

<u>Towards More Usable Dataset Search: From Query Characterization to Snippet Generation</u>.

In Proc. of the 28th ACM International Conference on Information and Knowledge Management (CIKM 2019).

[DBLP Page] [Google Scholar]

## **Awards and Honors**

• Outstanding Master Thesis of Nanjing University	2023
• Bosch Scholarship on 'Collaborative AI in Production' (fully funded for Ph.D. program)	2022
• National Scholarship	2021
• First-Class Academic Scholarship of Nanjing University	2020 - 2022
• Outstanding Graduate Student of Nanjing University	2019, 2021
• Jiangsu Financial Leasing Scholarship	2019
• Huawei Scholarship	2018
• First-Class Outstanding Student Scholarship	2016 - 2019

## Teaching Assistant

• Graph Theory and Algorithms Spring 2022

• Graph Theory Spring 2021, Spring 2020

- For about 70 undergraduate and graduate students.

## Academic Services

## Program Committee Member

• CIKM 2020 – 2023 • ISWC 2022 – 2023

2023

## **Review Committee Member**

• Journal of Web Semantics

## Others

IJCAI: Assistant Workflow Chair

## Language Skills

• Chinese: Native

• English: Advanced

- TOEFL-iBT: 107/120 (June 2021), GRE: 324/340 (Feb. 2021)

Updated at: Nov. 2023