SUN Yushi

Personal Data

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Experience

Aug 2025 - Present	Senior Researcher (Project UP), **Tencent Games**, Shenzhen
Sep 2021 - Oct 2025	PhD student in Computer Science, **HKUST**, Hong Kong
Sep 2017 - Jun 2021	BSc in Computer Science and Mathematics, **HKUST**, Hong Kong
Sep 2019 - Feb 2020	Exchange student at **ETH**, Zurich
July 2019	Exchange student at **NTU**, Singapore

Research Interest

My research interest lies in the following topics: Data Curation, RAG, and Agent Memory. My vision is to make (structured) data usable: starting from ensuring the annotation and preparation quality, to developing effective data organization paradigm, to improving usability of data in downstream applications (e.g., RAG).

Selected Publications and Preprints

2026 **MedKGI: Iterative Differential Diagnosis with Medical Knowledge Graphs and Information-Guided Inquiring**
(paper)
Qipeng Wang, Rui Sheng, Yafei Li, Huamin Qu, **Yushi Sun**[+], Min Zhu[+]
([+] : correspondance)
Submitted to ACL 2026
[KG]

2026 **CacheRAG: A Novel Approach to Enhance KG-based RAG Through Caching Mechanisms**
(paper)
Yushi Sun, Lei Chen
Under revision VLDB 2026
[RAG, KG]

2026 **LakeHopper: Cross Data Lakes Column Type Annotation through Model Adaptation**
(paper)
Yushi Sun, Xijia Li, Nan Tang, Quanqing Xu, Chuanhui Yang, Lei Chen
Submitted to KDD 2026
[Data Preparation]

2025   **KERAG: Knowledge-Enhanced Retrieval-Augmented Generation for Advanced Question Answering**
([paper](#))
Yushi Sun, Kai Sun, Yifan Ethan Xu, Xiao Yang, Xin Luna Dong, Nan Tang, Lei Chen
EMNLP 2025 Findings
[LLM, RAG, KG]

2024   **CRAG - Comprehensive RAG Benchmark**
([paper](#))
Xiao Yang*, Kai Sun*, Hao Xin*, **Yushi Sun***, Nikita Bhalla, Xiangsen Chen, Sajal Choudhary, Rongze Daniel Gui, Ziran Will Jiang, Ziyu Jiang, Lingkun Kong, Brian Moran, Jiaqi Wang, Yifan Ethan Xu, An Yan, Chenyu Yang, Eting Yuan, Hanwen Zha, Nan Tang, Lei Chen, Nicolas Scheffer, Yue Liu, Nirav Shah, Rakesh Wanga, Anuj Kumar, Wen-tau Yih, Xin Luna Dong
(* : equal contribution)
NeurIPS 2024
[LLM, RAG, Data Organization]

2024   **Are Large Language Models a Good Replacement of Taxonomies?**
([paper](#))
Yushi Sun, Hao Xin, Kai Sun, Yifan Ethan Xu, Xiao Yang, Xin Luna Dong, Nan Tang, Lei Chen
VLDB 2024
[LLM, Data Organization]

2024   **Cross-domain-aware Worker Selection with Training for Crowdsourced Annotation**
([paper](#))
Yushi Sun, Jiachuan Wang, Peng Cheng, Libin Zheng, Lei Chen, Jian Yin
ICDE 2024
[Data Annotation]

2023   **RECA: Related Tables Enhanced Column Semantic Type Annotation Framework**
([paper](#))
Yushi Sun, Hao Xin, Lei Chen
VLDB 2023
[Data Preparation]

INTERNSHIP

FEB 2025 - MAY 2025   Intern at Ant Research: Focusing on Multi-KG-based RAG research.

ACADEMIC ACHIEVEMENT

Postgraduate GPA: 4.043/4.300
HKUST Academic Achievement Medal; Top 1% in HKUST
First Class Honor graduate from HKUST
Undergraduate GPA: 4.030/4.300
Dean's list of the school of engineering

ACTIVITIES

Co-hosting the Meta KDD Cup: CRAG: Comprehensive RAG Benchmark ([link](#))

Scholarship and Awards

Sep 2025	HKUST Research Travel Grant
Sep 2024	HKUST Research Travel Grant
Jun 2024	HKUST Research Travel Grant
Jun 2024	RedBird Academic Excellence Award for Continuing PhD Students
Jun 2023	RedBird Academic Excellence Award for Continuing PhD Students
Oct 2021	RedBird PhD Scholarship
Sep 2021	Hong Kong PhD Fellowship Scheme
Jul 2020	HKSAR Government Scholarship Fund - Reaching Out Award
Jun 2020	Lee Hysan Foundation Scholarship
Dec 2019	University's Scholarship Scheme for Continuing Undergraduate Students
Feb 2019	The Cheng Foundation Scholarships for Mainland Students
Jan 2019	Pilot Mainland Experience Scheme for Post-Secondary Students
Dec 2018	University's Scholarship Scheme for Continuing Undergraduate Students
Jun 2017	Admission Scholarship for student with an outstanding curriculum
Mar 2017	Scholarship for outstanding students in Hubei by Tsinghua University

Teaching Experience

Fall 2024	Teaching Assistant of COMP 1021 Introduction to Computer Science
Fall 2022	Teaching Assistant of COMP 2711H Honors Discrete Mathematical Tools for Computer Science
Spring 2022	Teaching Assistant of COMP 5712 Introduction to Combinatorial Optimization

Services

Conference Reviewer: CIKM 2023
Journal Reviewer: TKDE 2024