

Xiating Ouyang

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Seeking full-time research/engineering positions to start in 2023/24

RESEARCH INTERESTS **Database systems and theoretical computer science:** Query processing and optimization, managing inconsistent data, algorithm design, complexity theory and graph theory.

EDUCATION **University of Wisconsin–Madison, Madison WI**
Ph.D. in Computer Science 2018 – 12/2023

Advisor: Prof. Paraschos Koutris

Thesis: *Finding Consistent Answers from Inconsistent Data: Systems, Algorithms, and Complexity*

Minor in Mathematics

M.Sc. in Computer Science 2018 – 2020

Hong Kong Polytechnic University, Hong Kong

B.Sc. in Computing (1st honor) 2014 – 2018

University of Waterloo, Waterloo ON

Exchange Program Winter 2017

EMPLOYMENTS **University of Wisconsin–Madison, Madison WI** 2019 – present
Research Assistant

Meta Inc., Seattle WA

Summer 2022

PhD Software Engineering Intern – System & Infra

Microsoft Gray Systems Lab, Azure Data, Redmond WA

Summer 2020

Research Intern with Alekh Jindal and Abhishek Roy

Thermo Fisher Scientific, Madison WI

Summer 2019

Software Engineering Intern

University of Wisconsin–Madison, Madison WI

2018 – 2019

Teaching Assistant

Hong Kong Polytechnic University, Hong Kong

2015 – 2018

Undergraduate Research Assistant

PUBLICATIONS *: alphabetical authorship following the tradition of theoretical computer science, †: equal contributions

LinCQA: Faster Consistent Query Answering with Linear Time Guarantees.

* with Zhiwei Fan, Paraschos Koutris and Jef Wijsen.

Proceedings of the ACM on Management of Data 1 (SIGMOD), 1, Article 38. doi:10.1145/3588718

Consistent Query Answering for Primary Keys on Path Queries.

* with Paraschos Koutris and Jef Wijsen.

Proceedings of the 40th ACM SIGMOD-SIGACT-SIGAI Symposium on Principles of Database Systems (PODS): 215–232, 2021. doi:10.1145/3452021.3458334

SparkCruise: Workload Optimization in Managed Spark Clusters at Microsoft.

Abhishek Roy, Alekh Jindal, Priyanka Gomatam, Xiating Ouyang, Ashit Gosalia, Nishkam Ravi, Swinky Mann and Prakhar Jain.

Proceedings of the VLDB Endowment (PVLDB), 14(12): 3122–3134, 2021. doi:10.14778/3476311.3476388

Unit interval vertex deletion: Fewer vertices are relevant.

Yuping Ke, Yixin Cao, Xiating Ouyang, Wenjun Li and Jianxin Wang.

Journal of Computer and System Sciences (JCSS), 96:109–121, 2018. doi:10.1016/j.jcss.2018.01.001

Consistent Query Answering for Simple Primary Keys on Rooted Tree Queries.

* with Paraschos Koutris and Jef Wijsen. Manuscript.

Certifiable Robustness for Naive Bayes Classifiers.Song Bian[†], Xiating Ouyang[†], Zhiwei Fan and Paraschos Koutris. Manuscript.

HONORS AND AWARDS	Anthony C. Klug NCR Fellowship, UW-Madison	2022
	ACM-ICPC North Central North America Regional Contest, 10/208	2018
	UW-Madison CS Special Fellowship	2018
	Hong Kong PhD Fellowship (declined)	2018
	Hong Kong SAR Government Scholarship	2016, 2017, 2018
	Dean's Honors List, HK PolyU	2015, 2016, 2018
	Outstanding Student Award, Dept. of Computing, HK PolyU	2018
	ACM-HK Chapter Collegiate Programming Contest, 3/34, 3/37	2016, 2017
	ACM-HK Chapter Collegiate Programming Contest, 3/34	2016
	CMA & Donars Scholarship	2016, 2017
	Hong Kong SAR Talent Development Scholarship	2015, 2017
	Hong Kong SAR Reaching Out Award	2017
	Wong Tit-Shing Student Exchange Scholarship	2017
	National High School Mathematics Competition, First Prize	2013
TALKS	LinCQA: Faster Consistent Query Answering with Linear Time Guarantees	
	◦ UW DB Seminar, 2022	
	◦ SIGMOD, 2023	
	Finding Consistent Answers from Inconsistent Data: Systems, Algorithms and Complexity.	
	◦ UW-Madison CS Research Symposium, 2023	
	◦ UW DB Affiliates , 2022	
	Consistent Query Answering for Primary Keys on Path Queries.	
	◦ UW DB Seminar , 2021	
	◦ PODS , 2021	
	Consistent Query Answering on Inconsistent Databases.	
	◦ UW DB Affiliates , 2021	
	First-order Logic, Database and Consistent Query Answering.	
	◦ Graduate Logic Seminar , 2021	
SERVICES	Organizer: UW-Madison DB Seminars	2022–present
	Volunteer: VLDB'21, SIGMOD'23, COCOON'17, SMARTCOMP'17	
	Judge: Departmental programming contest, UW–Madison	2019
	Coach: ACM-ICPC team, HK PolyU	2017 – 2018
	Vice president: Exploring Hong Kong Community	2015 – 2016
TEACHING EXPERIENCES	TA: CS 577 Introduction to Algorithms, UW–Madison	Spring 2019
	TA: CS 240 Discrete Mathematics, UW–Madison	Fall 2018
	TA: COMP 2422 Database Systems, HK PolyU	Fall 2017
SKILLS	Programming languages: C/C++/C#, Python, Java, PHP, JavaScript, SQL, Datalog	
	Operating systems: Linux(Ubuntu), MacOS, Windows	
	Tools: git, Spark, L ^A T _E X	
	Languages: English (proficient), Mandarin (native) and Cantonese (intermediate)	