Xiating Ouyang

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Research Interests

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

Education

University of Wisconsin–Madison, Madison WI
Ph.D. in Computer Science — 2018 – present
Advisor: Prof. Paraschos Koutris
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

Microsoft Gray Systems Lab, Azure Data, Redmond WA — Summer 2020
Research Intern
Host: 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*

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

Consistent Query Answering for Primary Keys on Path Queries.*
Paraschos Koutris, Xiating Ouyang 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

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, 96:109–121, 2018. doi:10.1016/j.jcss.2018.01.001

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, 3/37	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

Consistent Query Answering for Primary Keys on Path Queries. UW DB Seminar, 2021
Consistent Query Answering for Primary Keys on Path Queries. 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

Volunteer: VLDB'21
Webmaster: COCOON'17
Student organizer: SMARTCOMP'17, COCOON'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
Operating systems: Linux(Ubuntu), MacOS, Windows
Tools: git, Spark, LaTeX, tikz
Languages: English (proficient), Mandarin (native) and Cantonese (intermediate)