# YUETING CHEN

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828

0422

Google Scholar

# RESEARCH INTERESTS

I am passionate about working on data management problems. I have a broad range of interests in video analytics, databases, data management, and distributed data processing. I'm also interested in the challenges and opportunities posed by recent advances in ML and AI in data management tasks.

### ACADEMIC EXPERIENCE

Assistant Professor @ Seattle University	2024 Sep Present
• Post-doctoral Visitor @ York University	2023 Sep 2024 Sep.
• Course Director @ LA&PS, York University	2023 Sep 2024 Apr.
EDUCATION	
• York University, Canada	2017 Sep. – 2023 Aug.
Ph.D., Computer Science Supervisor: Prof. Xiaohui Yu	
• Shandong University, China	2014 Sep. – 2017 Jun.
M.S.E, Computer Science and Technology School of Computer Science and Technology	
• Shandong University, China	2010 Sep. – 2014 Jun.
B.S., Software Engineering School of Software Engineering	

#### **Publications**

- 1. Kaiwen Chen, Yueting Chen, Nick Koudas, Xiaohui Yu. Reliable Text-to-SQL with Adaptive Abstention Proceedings of the ACM on Management of Data. 3(1), pp.1-30. 2025.
- 2. Daren Chao, *Yueting Chen*, Nick Koudas, Xiaohui Yu. *Optimizing Video Queries with Declarative Clues*. In Proceedings of the VLDB Endowment, 17(11), pp.3256-3268. 2024.
- 3. Ziqiang Yu, Xiaohui Yu, Nick Koudas, *Yueting Chen*, and Yang Liu. A Distributed Solution for Efficient K Shortest Paths Computation Over Dynamic Road Networks. In IEEE Transactions on Knowledge and Data Engineering. 2024 Jan 1.
- 4. Ziqiang Yu, Xiaohui Yu, Tao Zhou, Yueting Chen, Yang Liu, and Bohan Li. ODIN: Object Density Aware Index for CkNN Queries over Moving Objects on Road Networks. In IEEE Transactions on Knowledge and Data Engineering. 2023 Dec 22.
- Daren Chao, Yueting Chen, Nick Koudas, Xiaohui Yu. Track merging for effective video query processing. In 2023 IEEE 39th International Conference on Data Engineering (ICDE), pp. 164-176. IEEE, 2023.
- Yueting Chen, Nick Koudas, Xiaohui Yu, Ziqiang Yu. Spatial and temporal constrained ranked retrieval over videos. Proceedings of the VLDB Endowment 15, no. 11 (2022): 3226-3239.
- 7. **Yueting Chen**, Xiaohui Yu, Nick Koudas. Ranked Window Query Retrieval over Video Repositories. In 2022 IEEE 38th International Conference on Data Engineering (ICDE), pp. 2776-2791. IEEE, 2022.
- 8. **Yueting Chen**, Xiaohui Yu, Nick Koudas, Ziqiang Yu. *Evaluating temporal queries over video feeds*. In Proceedings of the 2021 International Conference on Management of Data, pp. 287-299. 2021.

- 9. **Yueting Chen**, Xiaohui Yu, and Nick Koudas. *TQVS: Temporal queries over video streams in action*. In Proceedings of the 2020 ACM SIGMOD International Conference on Management of Data, pp. 2737-2740. 2020.
- 10. Ziqiang Yu, Xiaohui Yu, Nick Koudas, Yang Liu, Yifan Li, *Yueting Chen*, Dingyu Yang. *Distributed processing of k shortest path queries over dynamic road networks*. In Proceedings of the 2020 ACM SIGMOD International Conference on Management of Data, pp. 665-679. 2020.

#### PATENT

CN107580023B (China Patent): A stream processing job scheduling method and system

2017

### RESEARCH EXPERIENCE

#### • Research Intern

2021

IBM Center for Advanced Studies (CAS)

- o Mentor: Calisto Zuzarte
- o Research Topic: Deep reinforcement learning for data partitioning.

## • Research Assistant

2021-2023

IBM Center for Advanced Studies (CAS)

- o Mentor: Calisto Zuzarte
- Research Topic: Machine learning for the data partitioning problem.

# • Research Assistant

2017-2023

York University

- o Supervisor: Prof. Xiaohui Yu
- Research Topic: Evaluating temporal queries over videos.
- o Additional Contribution: Contributor of Apache Flink Open-Source Project (2018)

# Talks and Presentations

### • Talk at CASCON 2023

Sep. 2023

Machine Learning Based Modern Data Systems.

# • Presentation at ICDE 2023

Apr. 2023

Track merging for effective video query processing.

## • ML4DB Workshop at CASCON 2022

Nov. 2022

ML4DM: The second workshop on the emerging applications of machine learning in modern data management.

## • Presentation at VLDB 2022

Sep. 2022

Spatial and temporal constrained ranked retrieval over videos.

# $\bullet$ Presentation at ICDE 2022

May. 2022

Ranked Window Query Retrieval over Video Repositories.

# • Presentation at SIGMOD 2021

Jun. 2021

Evaluating temporal queries over video feeds.

## • Demo session at SIGMOD 2020

Jun. 2020

TQVS - Temporal queries over video streams in action.

### TECHNICAL SKILLS

- Proficient in common programming languages, including, Python, Java, Javascript, Bash, etc.
- Data analytics skills with common techniques and libraries including SQL, pandas, Spark, etc.
- Machine learning skills with common libraries including PyTorch, PyTorch Geometric, Keras, etc.
- Manage and work with clusters with common components including Hadoop, Spark, Kafka, etc.
- Full stack development, able to deliver end-to-end software product.

## Teaching

• CPSC 2430 - Data Structures

2025 Spring Quarter

• CPSC 5200 - SW Architecture and Design

2025 Spring Quarter

 $\bullet$  CPSC 5200 - SW Architecture and Design

2025 Winter Quarter 2024 Fall Quarter

 $\bullet$  CPSC 5021 - Database Systems

# York University (2023-2024)

• ITEC 4010 - System Analysis and Design II

2024 Winter

 $\bullet$  ITEC 4010 - System Analysis and Design II

2023 Fall

• ITEC 3505 - Project Management

2023 Winter

# TEACHING ASSISTANT

• EECS 4315 - Mission-Critical Systems

2023 Winter

• EECS 3342 - System Specification and Refinement

2020 Winter - 2023 Winter (4 terms)

• EECS 2030 - Advanced Object Oriented Programming

2021 Fall, 2022 Fall (2 terms)

• EECS 3311 - Software Design

2018 Winter - 2021 Winter (7 terms)

EECS 4312 - Software Engineering Requirements
 EECS 3221 - Operating System Fundamentals

2018 Fall, 2019 Fall (2 terms)

• EECS 1011 - Computational Thinking

 $2019 \ Summer$   $2017 \ Fall$ 

• MATH 1019 - Discrete Math for Computer Science

2017 Fall

# MENTORING

• Ming Kan Leung (NSERC USRA Project)

 $Summer\ 2022$ 

• Sayyed Raza (DARE Project)

Summer 2021

• Chin Uzoka (DARE Project)

Summer 2020

### SERVICES

## Chair

• KDD 2025 Web Chair

2025

### Reviewer Service

• ACM International Conference on Information and Knowledge Management (CIKM)

2024

### **External Reviewer**

 $\bullet$  International Conference on Management of Data (SIGMOD)

2023

 $\bullet$  International Conference on Very Large Data Bases (VLDB)

2023

• International Conference on Data Engineering (ICDE)

2023

# AWARDS AND PRIZES

• Recognized for positive change in accessibility, York University	2023
• The third class scholarship, Shandong University	2015, 2016
• The second class scholarship, Shandong University	2012, 2013
Third prize in Chinese University Students Service Outsourcing Innovation and Entrepreneurship Competition	2013
Outstanding worker of Campus Network Culture Center	2013
• First prize of the north area in NetEase Innovation Competition	2013
• First prize of the tenth Qi Lu Software Competition	2012