

Yuqing(Sunny) HUANG

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SUMMARY

Final year undergraduate student double-majoring in Computer Science and Combinatorics & Optimization. Broadly interested in Artificial Intelligence. Strong mathematical knowledge and intuition in solving computer science problems. Particularly interested in developing robust and adaptive models for solving computer vision problems.

SKILLS

Tools and Languages	Python, Java, C/C++, R, HTML/CSS/JavaScript, Bash, Git, \LaTeX , SQL
Libraries	PyTorch, TensorFlow, Scikit-Learn, Pandas, Matplotlib
Communication	English (professional), Mandarin (native), French (intermediate)

PROFESSIONAL EXPERIENCE

Computer Vision Research Assistant **Sept. 2021 — Dec. 2021**
University of Waterloo, supervised by Olga Veksler *Waterloo, Canada*

- Focused on combining CNNs with discrete optimization techniques on weakly supervised image segmentation.
- Utilized and compared various state-of-the-art object detection models for instance segmentation.
- Researched on fully convolutional one-stage instance segmentation, using center-ness, boundaries, and graph cuts.

Database Management Research Assistant **Jan. 2021 — Nov. 2021**
University of Waterloo, supervised by Semih Salihoglu *Waterloo, Canada*

- Focused on developing efficient and accurate algorithms for querying graph-structured data.
- Conducted experiments using Java and SQL on large databases.

Teaching Assistant **Sept. 2019 — Dec. 2019**
University of Waterloo *Waterloo, Canada*

- Teaching Assistant for Linear Algebra Course (Fall 2019). Responsible for holding tutoring hours.

Online Course Development Assistant **May 2019 — July 2019**
McGill University School of Continuing Studies *Montreal, Canada*

- Assisted the instructional design team with online Data Science for Business Decisions course.

PUBLICATIONS

1. Jeremy Chen, Yuqing Huang, Mushi Wang, Semih Salihoglu, Ken Salem. **Accurate Summary-based Cardinality Estimation Through the Lens of Cardinality Estimation Graphs.**

EDUCATION

University of Waterloo	Expected: Sept. 2018 — June 2022
Bachelor of Mathematics in Computer Science	94.3%
- Courses: Computational Vision, Machine Learning, Statistics & Data Analysis, Data Structures & Algorithms	
Bachelor of Mathematics in Combinatorics & Optimization	95.0%
- Courses: Graph Theory, Network Flow Theory, Applied Cryptography	
Lower Canada College	Sept. 2016 — May 2018
International Baccalaureate Diploma	43/45

HONORS AND AWARDS

Pasupalak UG Scholarship for Women in Computer Science (\$1500)	2021
Undergraduate Research Fellowship (\$7500)	2021
Mathematics Undergraduate Research Award (\$4500)	2021
President's Research Award (\$3000)	2021
Faculty of Mathematics Global Scholarship (\$25000)	2019
Faculty of Mathematics Promissory Scholarship (\$1000)	2019
University of Waterloo President's Scholarship of Distinction (\$2000)	2019
Graduated with the highest International Baccalaureate (IB) average at Lower Canada College	2018