

Ben, Tsun Ming CHEUNG
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Education

McGill University 08/2021 - Present
Doctor of Philosophy in Computer Science

- Supervised by Prof. Hamed Hatami.

The Chinese University of Hong Kong 08/2019 - 07/2021
Master of Philosophy in Computer Science

- Supervised by Prof. Andrej Bogdanov.
- Thesis title: *Classical simulation of quantum algorithms via Grothendieck's theorem.*

The Chinese University of Hong Kong 08/2014 - 07/2018
Bachelor of Science in Mathematics

- Cumulative GPA: 3.681/4.0, Major GPA: 3.649/4.0.
- Minor in Computer Science.

Publications

Separation of the factorization norm and randomized communication complexity

- With *Hamed Hatami, Kaave Hosseini, Morgan Shirley*. ECCC preprint TR22-165. (2023)

Boolean functions with small approximate spectral norm

- With *Hamed Hatami, Rosie Zhao, Itai Zilberstein*. ECCC preprint TR22-041. (2022)

On quantum versus classical query complexity

- With *Andris Ambainis, Andrej Bogdanov, Krishnamoorthy Dinesh*. ECCC preprint TR21-115. (2021)

Teaching Experiences

McGill University 09/2021 - present
Teaching Assistant, School of Computer Science

- COMP 360 - *Algorithm Design* (Fall 2021, Winter 2022, Winter 2023)
- COMP 531 - *Advanced Complexity Theory* (Fall 2022)

The Chinese University of Hong Kong 01/2020 - 05/2020
Teaching Assistant, Department of Computer Science and Engineering

- ENGG 2430A - *Probability and Statistics for Engineers* (Spring 2020)
- CSCI 3130 - *Formal Languages and Automata Theory* (Fall 2019)

The Chinese University of Hong Kong 07/2016, 08/2018
Teaching Assistant for Enrichment Programme for Young Mathematics Talents (EPYMT)

- EPYMT is a summer programme for mathematically talented secondary school students to have study experiences in advanced mathematics topics.

The Chinese University of Hong Kong

09/2017 - 01/2018

Tutor of First Year Honour Scheme (FYHS), Department of Mathematics

- FYHS is a programme for first-year undergraduates in mathematics to improve and consolidate fundamental university mathematics knowledge.

Working Experiences**The Education University of Hong Kong (EdUHK)**

08/2018 - 07/2019

Research Assistant, Department of Mathematics and Information Technology

- Supervised by Dr. Suen Chun Kit. Responsibilities include providing assistance in teaching and academic affairs, and helping the organization of educational activities.

Skills

- Languages: native Chinese (native Cantonese, proficient Mandarin), proficient English.
- Computing skills: Python, C++, MATLAB, HTML, LaTeX, MS Office.