

# He Entong *July 26, 2003*

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The University of Hong Kong • Pokfulam, Hong Kong SAR • China

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## Experience

- The University of Hong Kong POKFULAM, HONG KONG SAR, CHINA  
**Mitacs Globalink Research Internship - Supervisor: Prof. Anne Broadbent** 2024/5/27 - 2024/8/20  
Research focus: computational examples for Boolean constraint system algebras and non-local games. The project was co-supervised by Dr. Connor Paddock.
- HKU Summer Research Programme 2023 - Supervisor: Prof. Chenshu Wu** 2023/5/29 - 2023/8/10  
Focused on sensing techniques with quantum metrology and the sensor localization model it introduces. The project was co-supervised by Prof. Yuxiang Yang
- Student Teaching Assistant - Supervisor: Prof. Takwing Chim / Dr. Failung Tsang** 2022-2023  
Helped with (1) problem-solving session for COMP2113/ENGG1340 - Programming technologies, (2) conducting example classes for MATH1851/1853 - Introduction to calculus/linear algebra.
- Research Assistant - Supervisor: Prof. Daniel Zhuoyu, Long @ CUHK** 2022/7/1 - 2022/9/1  
Assisted the mathematical proof of theorems and programming in robust optimization. Promoted the proof of the submodularity property of revenue function defined by a variant of the HJB equation.
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## Awards

- HKU Presidential PhD Scholarship (2025 intake) - Conditional Offer** HONG KONG SAR, CHINA  
**HKU SRP 2023 Scholarship** HONG KONG SAR, CHINA  
**C.V. Starr Scholarship** HONG KONG SAR, CHINA  
**2021-2022, 2022-2023 Dean's Honour List Award - HKU Faculty of Engineering** HONG KONG SAR, CHINA  
**36<sup>th</sup> & 37<sup>th</sup> Chinese Physics Olympiad - Second Prize** GUANGDONG, CHINA
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## Publications

- Topics in Non-local Games: Synchronous Algebras, Algebraic Graph Identities, and Quantum NP-hardness Reductions* *Entong He*  
Preprint. Research conducted as a visiting research student at the uOttawa QUASAR group.  
**arXiv link:** <https://arxiv.org/pdf/2408.10114>
- QuERLoc: Towards Next-Generation Localization with Quantum-Enhanced Ranging* *Entong He, Yuxiang Yang, Chenshu Wu*  
Preprint, under review (INFOCOM 2025).  
**arXiv link:** <https://arxiv.org/pdf/2404.16895>
- Quantum Ranging Enhanced TDoA Localization* *Entong He, Yuxiang Yang, Chenshu Wu\**  
In proceedings of 2024 IEEE International Conference on Acoustics, Speech and Signal Processing.  
**doi:** 10.1109/ICASSP48485.2024.10446684
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## Service

Reviewer for 2025 IEEE International Conference on Acoustics, Speech and Signal Processing.

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## Education

- The University of Hong Kong POKFULAM, HONG KONG SAR, CHINA  
**Bachelor of engineering in computer science (in progress).** 2021 - present  
Major GPA: 4.05/4.3 (WES 3.88/4) || Cumulative GPA: 3.85/4.3 (WES 3.81/4) - **top 15**.
- National University of Singapore SINGAPORE  
**Exchange student @ NUS School of Computing.** 2024 Jan-May  
Courses: quantum computing, stochastic operations research, game theory, Bayesian statistics.  
Semester GPA: 4.75/5
- Shenzhen Senior High School SHENZHEN, GUANGDONG, CHINA  
**2021 NJCEE participant** (Subjects: Physics, Chemistry, Biology). 2018 Sep - 2021 Jun
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## Skills

- Technical specialties:** (1) **Mathematical Skills:** calculus, linear algebra, measure theory-based probability, design and analysis of algorithms. (2) **Programming Skills:** C, C++, Python, Mathematica.  
**Natural languages:** Mandarin (mother tongue); English (IELTS: 7.5; TOEFL: 107); Cantonese (fluent).
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