

He Entong *July 26, 2003*

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

Experience

The University of Hong Kong	POKFULAM, HONG KONG SAR, CHINA
Bachelor of engineering in computer science	2021.9.1 - present
Major GPA: 4.05/4.3 (WES 3.88/4) Cumulative GPA: 3.85/4.3 (WES 3.81/4) - top 10 .	
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.	

Awards

HKU Presidential PhD Scholarship (2025 intake) - Conditional Offer	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
36th & 37th Chinese Physics Olympiad - Second Prize	GUANGDONG, CHINA

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	

Service

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

Education

The University of Hong Kong	POKFULAM, HONG KONG SAR, CHINA
Bachelor of engineering in computer science (in progress).	2021 - present
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

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 (7.5 overall in IELTS); Cantonese (fluent).