

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	
Major GPA: 4.05/4.3 (WES 3.88/4) Cumulative GPA: 3.85/4.3 (WES 3.81/4)	2021.9.1 - present
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.	
Shenzhen Senior High School	SHENZHEN, GUANGDONG, CHINA
2021 NJCEE participant. Subjects: Physics, Chemistry, Biology.	2018.9.1 - 2021.6.7

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
36 th & 37 th Chinese Physics Olympiad - Second Prize	GUANGDONG, CHINA
2020 THUSSAT TACA - Top 1% in main subjects	GUANGDONG, CHINA

Publications

<i>Topics in Non-local Games: Synchronous Algebras, Algebraic Graph Identities, and Quantum NP-hardness Reductions</i>	Entong He
Preprint. Research conducted as a visiting research student at the uOttawa QUASAR group. arXiv link: https://doi.org/10.48550/arXiv.2408.10114	
<i>QuERLoc: Towards Next-Generation Localization with Quantum-Enhanced Ranging</i>	Entong He, Yuxiang Yang, Chenshu Wu
Preprint, under review (INFOCOM 2025). arXiv link: https://doi.org/10.48550/arXiv.2404.16895	
<i>Quantum Ranging Enhanced TDoA Localization</i>	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	

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.	
Courses: quantum computing, stochastic operations research, game theory, Bayesian statistics. Semester GPA: 4.75/5	
	2024 Jan-May

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).
