

2024 AI 2000 Most Influential Scholar
Faculty of Engineering, HKU



Professor Zhiyi Huang 黃志毅教授

Associate Professor, Department of Computer Science, Faculty of Engineering
工程學院計算機科學系副教授

Biography:

Before joining HKU, Professor Zhiyi Huang was a postdoc at Stanford University from 2013 to 2014, collaborating closely with Tim Roughgarden. He obtained his Ph.D. from the University of Pennsylvania in 2013, under the guidance of Sampath Kannan and Aaron Roth. During the time at the graduate school, he secured internships at Microsoft Research Redmond, working alongside Nikhil R. Devanur in the summers of 2011 and 2012. He graduated with a bachelor's degree from the first "Yao Class" under the tutelage of Andrew Yao at Tsinghua University in 2008. Professor Huang received prestigious accolades including the Best Paper Awards of FOCS 2020 and SPAA 2015, an Excellent Young Scientists Fund (HK & Macau) by NSFC, and an Early Career Award by RGC Hong Kong

Professor Huang's research focuses on Theoretical Computer Science, which studies what can be computed with limited computational resources, such as time and space. With a primary focus on information, Professor Huang's research group investigates online algorithms for making sequential decisions in matching markets under the uncertainty of the future (i.e., lack of information), with applications in online advertising, ride-hailing and sharing, and online labour markets. His team also considers the sample complexity (i.e., the amount of data/information needed) of various learning problems, with applications in auction design, contract design, online decision-making, etc.

簡歷:

黃志毅教授是香港大學工程學院計算機科學系副教授，在加入港大前，黃教授在 2013-2014 年於史丹佛大學擔任博士後研究員，師從 Tim Roughgarden 教授。他在 2013 年於賓夕法尼亞大學獲得博士學位，師從 Sampath Kannan 教授和 Aaron Roth 教授。他亦曾於 Nikhil R. Devanur 博士的指導下在微軟研究院雷德蒙德進行暑期實習，從事在線算法研究。在此之前，黃教授於 2008 年從清華大學的第一屆「姚班」畢業及取得學士學位，師從姚期智先生。黃教授曾獲多個獎項，包括 FOCS 2020 和 SPAA 2015 最佳論文獎、國家自然科學基金委優秀青年科學基金（港澳）、香港研究資助局的傑出青年學者獎等獎項。

黃教授的研究領域是理論計算機科學 - 研究在時間、空間等計算資源不足的情況下什麼可以進行計算。黃教授的研究團隊主要研究信息在計算問題中的作用及如何設計在線算法，從而在對將來有一定不確定性的匹配市場中進行決策。這些算法的應用場景包括在線廣告平台、網約車平台、以及在線勞動力平台等。研究方向也包括統計機器學習的樣本複雜度，及其在機制設計、合約設計、在線決策等問題中的應用。