THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

Department of Computing
電子計算學系

Research Centre on
Data Science & Artificial Intelligence
RC-DSAI
人工智能與數據科學研究中心

IEEE
Computational
Intelligence
Society®

Distinguished Seminar Series on Data Science & Artificial Intelligence

What can AI do for End-to-End Data Analytics?

Prof. Beng Chin Ooi
Chair Professor
Department of Computer Science
School of Computing
National University of Singapore
Singapore

📅 **16 July 2021 (Fri)**

🕐 **11:00 - 12:00 (HKT, UTC+8)**

📍 **Online via Zoom**

✎ **Please register at https://polyu.hk/Ehzap or scan the QR code**

All are welcome!

Abstract

While AI and data-driven approaches are still evolving, they are likely to surpass old practices and humans in many application domains soon. The potential advantages are not only faster and more accurate analysis, but also the democratization of services. Notwithstanding, there are some common challenges when applying existing approaches onto any domain, due to the noise and bias of data, complex and heterogeneous feature relations, access control and data privacy and etc. In this talk, I shall discuss our design and implementation strategies: solve common challenges, instill domain knowledge, automate knowledge extraction, and enable system-based global optimization. I shall discuss a few of our subsystems that exploit AI in the end-to-end data analytics pipeline.

About the Speaker

Beng Chin is Lee Kong Chian Centennial Professor and NGS faculty member at the National University of Singapore (NUS), an adjunct Chair Professor at Zhejiang University, China, and the director of NUS AI Innovation and Commercialization Centre at Suzhou, China. He obtained his BSc (1st Class Honors) and PhD from Monash University, Australia, in 1985 and 1989 respectively. He is a fellow of the ACM , IEEE, and Singapore National Academy of Science (SNAS). Beng Chin serves as a non-executive and independent director of ComfortDelgro, a transportation company.

Beng Chin's research interests include database systems, distributed and blockchain systems, and large scale analytics, in the aspects of system architectures, performance issues, security, accuracy and correctness. He works closely with the industry (e.g. NUHS, Jurong Health, Tan Tok Seng Hospital and Singapore General Hospital on healthcare analytics and prediabetes prevention), and exploits IT for efficiency in various application domains, including healthcare, finance and smart city.

Beng Chin was the recipient of ACM SIGMOD 2009 Contributions award, a co-winner of the 2011 Singapore President's Science Award, the recipient of 2012 IEEE Computer Society Kanai award, 2013 NUS Outstanding Researcher Award, 2014 IEEE TCDE CSEE Impact Award, 2016 China Computer Federation (CCF) Overseas Outstanding Contributions Award, and 2020 ACM SIGMOD EF Codd Innovation Award. He was a recipient of VLDB'14 and VLDB'19 Best Paper awards, and SIGMOD 2020 Research Highlight award. Beng Chin has served as a PC member for international conferences such as ACM SIGMOD, VLDB, IEEE ICDE, WWW, and SIGKDD, and as Vice PC Chair for ICDE'00,04,06, PC co-Chair for SSD'93 and DASFAA'05, PC Chair for ACM SIGMOD'07, Core DB PC chair for VLDB'08, and PC co-Chair for IEEE ICDE'12, IEEE Big Data'15, BOSS'18, IEEE ICDE'18, Industry track of VLDB'19, BCDL'19 and ACM SoCC'20. He was an associate editor of VLDB Journal, Springer's Distributed and Parallel Databases, IEEE Transactions on Cloud Computing (TCC) and IEEE Transactions on Knowledge and Data Engineering, Editor-in-Chief of IEEE Transactions on Knowledge and Data Engineering (TKDE)(2009-2012), and Elsevier's founding co-Editor-in-Chief of Journal of Big Data Research (2013-2016). He is serving as an associate editor of Communications of ACM (CACM), and the founding editor-in-chief of ACM/IMS Transactions on Data Science (2018 -2021).