AI in Education: Lessons Learned from Four Decades of Research and A Vision for Hybrid Intelligence

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Date: July 8, 2024 (Monday)
Time: 14:00 – 15:30 (HKT)
Venue: Room 408–410, Meng Wah Complex, HKU / Online via Zoom (Hybrid mode)

Zoom Meeting Link:
https://hku.zoom.us/j/96445926369?pwd=8uUNBNrwKjAmyvQZk0tAxIvAHHGcak.1
Meeting ID: 964 4592 6369
Password: 890051

Chair: Professor Nancy Law

Registration:
https://hkuems1.hku.hk/hkuems/ec_regform.aspx?guest=Y&ueid=94698

Abstract:
This paper presents a multi-dimensional view of AI's role in learning and education, emphasizing the intricate interplay between AI, analytics, and the learning processes. Here, I challenge the prevalent narrow conceptualisation of AI as stochastic tools as exemplified in generative AI and argue for the importance of alternative conceptualisations of AI. I highlight the differences between human intelligence and artificial information processing, the importance of hybrid human-AI systems to extend human cognition, and posit that AI can also serve as an instrument for understanding human learning. The talk presents three unique conceptualisations of AI in education: the externalization of human cognition, the internalization of AI models to influence human mental models, and the extension of human cognition via tightly coupled human-AI hybrid intelligence systems. Examples from current research and practice are examined as instances of the three conceptualisations, highlighting the potential value and limitations of each conceptualisation for education, as well as the perils of overemphasis on externalising human cognition. It concludes with advocacy for a broader approach to AI in Education that goes beyond considerations on the design and development of AI solutions in Education, but also includes educating people about AI and innovating educational systems to remain relevant in an AI-ubiquitous world.

About the speaker:

Mutlu Cukurova is Professor of Learning and Artificial Intelligence at University College London. Prof. Cukurova investigates human-AI complementarity in education, aiming to address the pressing socio-educational challenge of preparing people for a future with AI systems that will require a great deal more than the routine cognitive skills currently prized by many education systems and traditional approaches to automation. Prof. Cukurova is the Director of the UCLAIT team and works with UNESCO's Unit for Technology and AI in Education as an external expert. He contributed to numerous influential policymaking documents including UNESCO's recent report on *Guidance for generative AI in education and research* and the report on UNESCO AI competency frameworks for teachers. He was the programme chair of the International Conference of AI in Education in 2020 and CSEDU in 2022, currently serving as the editor of the British Journal of Educational Technology and an Associate Editor of the International Journal of Child-Computer Interaction.

~ All are welcome ~
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