

DEPARTMENT OF COMPUTER SCIENCE

SEMINAR

2026 SERIES

Knowledge-Centric AI for Healthcare Decision Support

DATE & TIME

2 FEB 2026 (MON) 4:00 - 5:00 PM

ONLINE VIA ZOOM



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ABSTRACT

Healthcare is a cornerstone of societal well-being, yet it faces unprecedented challenges driven by global population aging, leading to a reality of “more people, more sickness, but fewer doctors.” At the same time, the digitalization of healthcare systems has accumulated tremendous medical data, offering new opportunities for artificial intelligence (AI) in healthcare. In this talk, I will present my research on knowledge-centric AI for healthcare decision support, which aims to bridge the translational gap between methodological innovation and real-world clinical adoption. I will first introduce technical frameworks built on three core pillars: representation learning from high-order knowledge, logical reasoning with multimodal knowledge, and synergistic modelling of generalist and specialist knowledge. Building on these foundations, I will demonstrate applications across personalized health, population health, and mobile and wearable health, targeting key dimensions of decision support, including predictability, interpretability, reliability, adaptability, and equity.



**SPEAKER'S
BIOGRAPHY**



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