

DEPARTMENT OF COMPUTER SCIENCE

SEMINAR

2024 SERIES

Have AI Models Truly Simplified Healthcare? Beyond Model-centric AI, Data- and Human-centric AI for Simplified Healthcare

DATE & TIME

12 JUN 2024 (WED) 4:00 – 5:00 PM

ONLINE VIA ZOOM



DR. XIAOQING GUO

Postdoctoral Researcher
Department of Engineering Science
University of Oxford

ABSTRACT

In healthcare, the exponential growth of artificial Intelligence (AI) has led to the development of numerous advanced AI models for disease diagnosis and lesion segmentation, and etc. Despite these advancements, the question arises: Have AI models truly simplified healthcare? In this talk, I will share my thinking on this question, and present my research aimed at simplifying healthcare in real-world deployment.

To effectively simplify healthcare, we must go beyond just focusing on AI models. Instead, we should consider the challenges inherent in deploying these models in real clinical practice. These challenges encompass the adaptability of AI models across diverse medical centers with varying medical imaging devices or patient populations (data-centric AI), alongside the interaction/collaboration between clinicians and AI models to ensure clinicians' trust in AI model decisions (human-centric AI).

As for data-centric AI, I have developed many annotation-efficient deep learning technologies to enhance model performance and efficiency when deploying in a new medical scenario, thus reducing the burden of clinicians in large-scale dataset annotation. On the other hand, my research on human-centric AI emphasizes the importance of close collaboration and trust between AI and clinicians, such as enhancing communication between models and clinicians through large language models, providing more detailed explanations for clinicians' decision-making processes, and deferring to radiologists when AI models fail.



SPEAKER'S
BIOGRAPHY



REGISTER NOW