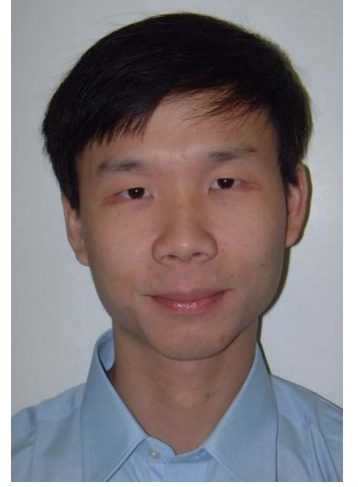


Seminar Series

AI Theory, Generative Models, and Biomedical Applications



Dr. Hwee Kuan Lee
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Thursday, July 20th, 2023 | 13:00 – 14:00
Ömer Korzay Conference Hall – EE Building

Abstract: In this seminar, I will discuss some AI theory, generative models and its applications. In particular, I will focus on a specific use case on digital pathology. In the digital pathology work, we proposed an indirect way of training our AI models using a weakly supervised, multi-instance, multi-task learning paradigm that avoids detailed annotations on WSI. With this indirect way of training our AI, we demonstrated that our learning paradigm can elucidate detailed morphology of WSI very well.

Bio: Hwee Kuan Lee's current research work involves the development of Artificial Intelligence (AI) research for clinical and biological applications. His laboratory focuses on diverse research activities, including more basic AI centric research as well as AI applications. Clinical application areas include, diagnostics in cancers, spatial omics, cardiology, dermatology and interventional radiology. In the area of biology, Hwee Kuan's laboratory works on the development of AI in protein science and drug discovery. Hwee Kuan's primary appointment is as the Deputy Director for Training and Talent development in the Bioinformatics Institute. He also holds multiple adjunct and joint appointments in the local universities and other research institutions