



統計科學研究所

INSTITUTE OF
STATISTICAL SCIENCE



SEMINAR



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Seminar

Title : Fight for Fairness in AI for Medical Imaging

Speaker : Prof. Po-Chih (Bruce) Kuo (郭柏志 教授)

(Department of Computer Science, National Tsing
Hua University)

Time : 10:30 ~ 12:00, Monday, September 11, 2023

Place : Auditorium, B1F, Institute of Statistical Science

Abstract

Deep learning models have shown promise in medical imaging analysis, but concerns exist regarding biases leading to performance disparities among protected groups (e.g., age, race, gender). It has been shown that AI models can learn race on medical images, leading to algorithmic bias. In this talk, I will go through our recent approaches to enhance the fairness of medical image models by eliminating bias related to race, age, and gender. We hypothesize models may be learning patients' demographics via shortcut learning and combat this using self-supervised learning, image augmentation, siamese networks and adversarial learning.

※ Tea reception starts at 10 : 10.

※ Lecture in Mandarin. Online live streaming through Cisco Webex will be available.