



Hong Kong Institute for Data Science 香港城市大學 City University of Hong Kong

Integrating AI in Imaging, Quantification, and Identification of COVID-19

Date: 3 March 2021 (Wednesday)

Time: 1:00pm - 2:00pm

Enquiries: hkids@cityu.edu.hk

Seminar link: <u>https://cityu.zoom.us/j/92418673707</u>

ABSTRACT

This talk will discuss how AI can be applied to imaging, quantification and identification of COVID-19. Specifically, for better clinical outcome, full-stack AI should be designed, starting from source (i.e., automated patient setup and fast imaging) to disease detection, follow-up, diagnosis, and outcome prediction in the whole clinical pipeline. The examples of how these full-stack AI can be fast developed and applied to contactless imaging of COVID-19, accurate delineation of lung infection, as well as identification of COVID-19 from other pneumonia and the predication of mild-to-severe conversion for COVID-19 patients are demonstrated in this talk. This imagingbased full-stack solution for COVID-19 also got SAIL Award in The World Artificial Intelligence Conference 2020.



ONLINE SEMINAR



Prof Dinggang SHEN GUEST SPEAKER'S PROFILE

Prof Dinggang Shen is Professor and Dean of School of Biomedical Engineering, ShanghaiTech University, and also Co-CEO of United Imaging Intelligence. He was Jeffrey the Houpt Distinguished Investigator, and a Professor of Radiology, Biomedical Research Imaging Center, Computer Science, and Biomedical Engineering in the University of North Carolina at Chapel Hill (UNC-CH). He was Director of the Center of Image Analysis and Informatics, the Image Display, Enhancement, and Analysis Lab in the Department of Radiology, and also the medical image analysis core in the BRIC. Before joining UNC as an Associate Professor in April 2008, he was a tenure-track Assistant Professor in the University of Pennsylvanian, and a faculty member in the Johns Hopkins University.

Prof Shen is Fellow of IEEE, Fellow of The American Institute for Medical and Biological Engineering, Fellow of The International Association for Pattern Recognition, and also Fellow of The Medical Image Computing and **Computer Assisted Intervention (MICCAI)** Society. His research interests include medical image analysis, computer vision, and pattern recognition. He has published more than 1100 peer-reviewed papers in the international journals and conference proceedings, with Hindex 107 and more than 45,000 citations. He serves as an editorial board member for eight international journals. Also, he has served in the Board of Directors, MICCAI Society, in 2012-2015, and was General Chair for MICCAI 2019.

All are welcome