香港浸會大學
HONG KONG BAPTIST UNIVERSITY

DEPARTMENT OF
COMPUTER SCIENCE
計算機科學系

ONLINE SEMINAR
2022 SERIES

Department of Computer Science

Dr. Yanyu Xu

Research Scientist
IHPC, A-STAR

Register Now

Date: 10 August 2022 (Wednesday)
Time: 11:30am – 12:30pm
Registration: http://bit.ly/bucs-ereg

(*Zoom details will only be provided to registrants)

Efficient Learning with Less Annotations and Fewer Trained Parameters

ABSTRACT

The current deep learning has attained remarkable achievements across multiple application domains. But the quest for improved accuracy on large-scale problems is driving the use of deeper neural networks. It will in turn increase energy and financial consumption and climate-changing carbon emissions. Towards the energy-efficient AI goal, this talk focuses on the efficiency issues of the expensive manual annotations and large model parameters. The recent data-driven models usually require sufficient annotated medical data to achieve high performance and it is laborious and tedious to manually annotate the labels. For the medical segmentation masks, the annotators also need professional medical knowledge. Yanyu will introduce a few simple yet effective solutions that can greatly reduce the annotation costs without causing a significant drop in performance.

BIOGRAPHY

Dr. Yanyu Xu is a research scientist from IHPC, A-STAR. He obtained his Ph.D. from University of Chinese Academy of Sciences on 2020. He focuses on image and video understanding, medical imaging analysis and efficient learning. So far, he has published research works in top-tier AI journals and conferences, including IEEE TPAMI, IEEE TNNLS, CVPR, ICCV, ECCV, IJCAI, AAAI, NeurIPS and MICCAI. His work of personalized saliency detection was nominated as outstanding student award (runner-up) in IJCAI 2017. He has served as a senior program committee in AAAI 2022.