THE HONG KONG POLYTECHNIC UNIVERSITY
香港理工大學

Department of Computing
電子計算學系

RESEARCH SEMINAR

Towards Impactful Research: From Visual Domain Adaptation to Deep Video Compression

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Date : 9 December 2022 (Fri)
Time : 11:00 am - 12:00 pm
Venue: PQ304

Abstract

In this talk, I will first introduce our previous domain adaptation works, including our pioneering works in developing new domain adaptation (transfer learning) methods for video event recognition, and a series of subsequent works for single source domain adaptation, multi-domain adaptation, heterogeneous domain adaptation, domain generalization and deep domain adaptation, as well as their applications in various computer vision tasks. Then I will describe our previous deep video compression works, including the first end-to-end optimized deep video compression (DVC) framework, and our subsequent works including the feature-space video coding (FVC) network, as well as our recent works for coding mode prediction and stereo video compression.

About the Speaker

Prof. Dong Xu is a Professor in the Computer Science Department, The University of Hong Kong. Before joining HKU, he worked as a postdoctoral research scientist at Columbia University, a tenure-track and tenured faculty member at Nanyang Technological University, and the Chair in Computer Engineering at The University of Sydney. He is an active researcher in the areas of computer vision, multimedia and machine learning. He was selected as a Clarivate Analytics Highly Cited Researcher twice in 2021 and 2018. He was also selected as an Australian Research Council Future Fellow (Level 3, Professorial Level) in 2018 and awarded the IEEE Computational Intelligence Society Outstanding Early Career Award in 2017. He has published more than 150 papers in IEEE Transactions and leading conferences, among which two works were awarded the Best Student Paper Award in CVPR 2010 and the IEEE T-MM Prize Paper Award in 2014.

He is/was on the editorial boards of ACM Computing Surveys and IEEE Transactions including T-PAMI, T-IP, T-NNLS, T-CSVT and T-MM. He will serve/served as the Program Coordinator of ACM Multimedia 2024, a steering committee member of ICME (2016-2017) and a Program Co-chair of five international conferences/workshops (e.g., ICME 2014). He is a Fellow of IEEE and IAPR and a Foreign Member of the Academia Europaea (The Academy of Europe).

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