



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

SPEAKER Professor Dong XU

Professor
Department of Computer Science
The University of Hong Kong

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VENUE Y6405, CS Seminar Room, 6/F., Yellow Zone, Yeung Kin Man Academic Building, City University of Hong Kong, 83 Tat Chee Avenue, Kowloon Tong, Hong Kong

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.

BIOGRAPHY

Prof. Dong Xu is a Professor in the Computer Science Department, The University of Hong Kong, where he serves as the Director of the JC STEM Lab of Multimedia and Machine Learning. After receiving his PhD degree from University of Science and Technology of China in 2005, 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. Prof. Xu 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 including CVPR, ICCV, ECCV, ICML, ACM MM and MICCAI. His co-authored works (with his former PhD students) received the Best Student Paper Award in CVPR 2010 and the IEEE Transactions on Multimedia Prize Paper Award in 2014. He is/was on the editorial boards of ACM Computing Surveys (Senior Associate Editor since October 2022), IEEE Transactions including T-PAMI, T-IP, T-NNLS, T-CSVT and T-MM, and other five journals, as well as served as a guest editor of more than ten special issues in multiple journals (e.g., IJCV, IEEE/ACM Transactions). 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 was also involved in the organization committees of many international conferences and served as an area chair of leading conferences such as ICCV, CVPR, ECCV, ACM MM and AAAI. He received the Best Associate Editor Award of T-CSVT in 2017. He is a Fellow of IEEE and IAPR (The International Association for Pattern Recognition) and a Foreign Member of the Academia Europaea (The Academy of Europe).

All are welcome!



In case of questions, please contact Professor Dapeng Oliver WU at dapengwu@cityu.edu.hk, or visit the CS Departmental Seminar Web at <https://www.cs.cityu.edu.hk/events/cs-seminars/recent-cs-colloquia>.