



Hashing for Semantic Large Scale Image Retrieval in Non-stationary Environment

Prof. Wing W. Y. Ng
School of Computer Science and Engineering
South China University of Technology

DATE: Thursday, 18 February 2015
TIME: Starting at 1pm
VENUE: Murdoch University, Social Science Building (Building 440) SS2.051.
COST: Free
CONTACT: Kevin Wong (k.wong@murdoch.edu.au)

Abstract:

A very large volume of images is uploaded to the Internet daily. Hashing methods provide efficient image retrieval results with sublinear time complexity. However, current hashing methods for image retrieval are designed for static databases only. They failed to consider the fact that the distribution of images can change when new images are added to the database over time. The changes in the distribution include both the discovery of a new class and distribution of images within a class owing to concept drifting. In this seminar, a brief introduction on hashing methods for large scale image retrieval will be given. Then, new research results on hashing for non-stationary environment will be explored.

About the speaker:



Prof. Wing W. Y. Ng received his B.Sc. and Ph.D. degrees from Hong Kong Polytechnic University in 2001 and 2006, respectively. He is now a Professor with the School of Computer Science and Engineering, South China University of Technology, China. His major research interests are machine learning and image retrieval in big data and non-stationary environments. Prof. Ng published 20+ journal papers in IEEE Transactions on Neural Networks, IEEE Transactions on Cybernetics, IEEE Transactions on Multimedia, etc. His works have been cited 1000+ times and h-index is 16 (Google Scholar). His IEEE TNN publication proposing the localized generalization error model for neural networks has been cited 120 times. He is the principle investigator of three China National Nature Science Foundation projects and a Program for New Century Excellent Talents in University from China Ministry of Education. Prof. Ng is currently an associate editor of the International Journal of Machine Learning and Cybernetics. He is an IEEE senior member and served as the Board of Governor of IEEE Systems, Man and Cybernetics Society (SMCS) in 2011 - 2013.