



The University of Hong Kong
Department of Statistics and Actuarial Science
Numerical Mathematics and Applied Analysis Group of Department of Mathematics

HKU Research Theme on Computational Science Seminar Series

KERNEL-BASED UNSUPERVISED LEARNING

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Date: Wednesday, March 18, 2009

Time: 3:00 p.m. – 4:00 p.m.

Venue: Room 524, Meng Wah Complex

Abstract

In this talk, we will first talk about a recent kernel-based approach for unsupervised learning, which is called maximum margin clustering (MMC). Computationally, it involves non-convex optimization and has to be relaxed to different semidefinite programs (SDP). However, SDPs are computationally very expensive. To make MMC more practical, we propose an efficient relaxation that can be formulated as multiple kernel learning and is efficiently solved using cutting plane method. Experiments demonstrate that the proposed approach is often more accurate, much faster and can handle much larger data sets.

Visitors Please Note that the University has limited parking space. If you are driving please call the Department at 2859 2466 for parking arrangement.

All interested are welcome