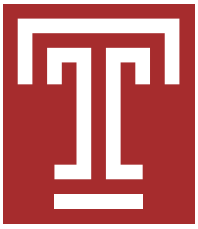

Spring 2009 CIS Colloquium Series

Supervised Dimensionality Reduction via Convex Optimization

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February 18, 2009

Abstract

Recently, supervised dimensionality reduction has been gaining attention, owing to the realization that data labels are often available and indicate important underlying structure in the data. In this work, we propose a novel convex supervised dimensionality reduction approach based on exponential family PCA, which is able to avoid the local optima of typical EM learning. Moreover, by introducing a sample-based approximation to exponential family models, it overcomes the limitation of the prevailing Gaussian assumptions of standard PCA, and produces a kernelized formulation for nonlinear supervised dimensionality reduction.

Location: 4th Floor Conference Room (Wachman 447)
Time: 12-1pm, Wednesday, February 18, 2009
Refreshments will be served!