

UW CENTER FOR PATTERN ANALYSIS AND MACHINE INTELLIGENCE

GRADUATE SEMINAR SERIES

Kernel Mean Matching Algorithm and Applications in Covariate Shift

Speaker: Yun-Qian Miao

Date: March 13, 2013

Time: 4:00 pm – 4:30 pm

Place: E5 (5128) Refreshments will be served

Abstract :

Given a set of training points and a set of testing points which come from shifted distributions, the Kernel Mean Matching (KMM) algorithm is a process to re-weight the training points such that the two distributions are closely matched. It works by minimizing the means of training points and testing points in a reproducing kernel Hilbert space.

In this talk, I will review the techniques of KMM and the covariate shift problem. On the application side, cross-dataset facial expression recognition will be explored by applying KMM with a supervised extension. At the end, the parameter selection problem of KMM will also be discussed.