

Large Margin Hierarchical Classification

by

Xiaotong Shen

University of Minnesota

School of Statistics

Minneapolis, MN 55455, USA

`xshen@stat.umn.edu`

Abstract

In this talk, we will present a large margin method for hierarchical classification. The main focus here is to utilize the dependency structure among classes to improve the classification performance of flat classification. In such a situation, flat classification is infeasible in the presence of a large number of dependent classes, which occurs often in gene function discovery. Various hierarchical losses will be discussed, in addition to an application to gene function prediction.

This is joint work with Huixin Wang and Wei Pan.