

The Fox School of Business

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Department of Statistics



Temple University

ANNOUNCES A  
COLLOQUIUM

**Dr. Junhui Wang**

*Department of Statistics  
Columbia University*

will speak on

## **On Large Margin Hierarchical Classification**

**Time: 3:00 – 4:00 PM**

**Date: Wednesday, November 28, 2007**

**Place: Tuttleman Learning Center 401A**

### **Abstract**

Hierarchical classification is critical to knowledge and context management as well as knowledge exploration, as in gene function classification and discovery and document categorization. In hierarchical classification, an input is classified by a structured hierarchy. In a situation as such, the central issue is how to effectively utilize inter-class relationship to improve the generalization performance of flat classification ignoring such dependency. In this talk, a novel large margin method based on constraints characterizing multi-path hierarchy is presented within the framework of regularization. In particular, I will discuss three aspects: (1) the idea and methodology development; (2) computational tools; (3) a statistical learning theory. Numerical examples will be provided to demonstrate the advantage of our proposed methodology against other existing competitors. An application to gene function prediction and discovery will be discussed.

Guest Parking Available in Visitors' Parking Area 3  
(Park Avenue between Cecil B. Moore Avenue & Oxford Street)