

# 学术报告会

时间: 2013年10月31日(周四)18:00

地点: 电院群楼2-406会议室

## Recent advances in large linear classification

**Prof. Chih-Jen Lin**

**National Taiwan University**



### Abstract:

Model Linear classification is a useful tool in machine learning and data mining. For some data in a rich dimensional space, the prediction performance of linear classifiers has shown to be close to that of nonlinear classifiers such as kernel methods, but training and testing speed is much faster. Recently, many research works have proposed efficient optimization methods to construct linear classifiers. We briefly discuss some of them that were considered in our development of the software LIBLINEAR. We then move to discuss some extensions of linear classification. In particular, linear classifiers can be useful to either directly or indirectly approximate kernel classifiers. I will show some real-world examples for which we try to achieve fast training/testing speed, while maintain competitive accuracy. Finally, future challenges of this research topic, in particular, aspects on big-data linear classification, will be discussed.

### Biography:

**Chih-Jen Lin** is currently a distinguished professor at the Department of Computer Science, National Taiwan University. He obtained his B.S. degree from National Taiwan University in 1993 and Ph.D. degree from University of Michigan in 1998. His major research areas include machine learning, data mining, and numerical optimization. He is best known for his work on support vector machines (SVM) for data classification. His software LIBSVM is one of the most widely used and cited SVM packages. For his research work he has received many awards, including the ACM KDD 2010 and ACM RecSys 2013 best paper awards. He is an IEEE fellow and an ACM distinguished scientist for his contribution to machine learning algorithms and software design. More information about him can be found at <http://www.csie.ntu.edu.tw/~cjlin>.