INSTRUCTOR Bowei Xi

OFFICE HAAS 228

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COURSE WEB PAGE http://www.stat.purdue.edu/~xbw/courses/stat524/524.htm

GRADER TBA

CLASS MEETS TTh 7:30am-8:45am REC 113

OFFICE HOURS Thu 10:30am-12

TEXT


The Elements of Statistical Learning: Data Mining, Inference, and Prediction, by Hastie, Tibshirani and Friedman, Recommended

GRADING POLICY

- Midterm Exam - 30%. TBA
- Final - 40%. TBA
- Homeworks - 30%: Weekly homeworks will be assigned every Thu morning and due next Thu in class. Late homework will not be graded. One homework with the lowest grade will be dropped.

The percentage grades needed to achieve an A, B, C, or D will follow approximately the following scale: 90 - 100 = A, 80 - 89 = B, 70 - 79 = C, 55 - 69 = D, 0 - 54 = F. The minimum score needed for a given letter grade could be lowered if necessary but will not be raised. The scale for assigning for pluses and minuses will occur at approximately 3-point increments.

PREREQUISITE Stat 512 or an equivalent course in applied linear models.

COURSE SUMMARY

We will study principal components, factor analysis, canonical correlation, discriminant analysis and clustering algorithms, bagging and boosting, neural networks and support vector machines. Emphasis will be placed on using SAS to analyze data for most of the topics. For new statistical tools, R will be used.

I will post the new notes and related SAS/R code and data 24 hours in advance. Please print out the notes, run SAS/R code and print out outputs, and bring them to the class.

CAMPUS EMERGENCY

In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor’s control. Here are ways to obtain information about the changes in this course.

- Purdue homepage: http://www.purdue.edu
- Course webpage: http://www.stat.purdue.edu/~xbw/courses/stat524/524.htm