CS 612: Indepent Work in Computer Science, Spring 2012

Course Description

Credits: 1-3. Reading course for graduate students..

By the end of the course, the successful student is expected to be able to:
_ broaden the knowledge in a specific subject in the area of either data mining or bioinformatics;
_ survey, test and compare different tools for a particular data mining or bioinformatics applications;
_ write comprehensive documentation and to communicate effectively results to a range of audiences;

Jinze Liu	**Meeting Time**: TR 11:00AM-12:00PM
liuj@cs.uky.edu	**Meeting Place**: Computer Labs.
http://www.cs.uky.edu/~liuj	**Office Hours**: By appointment
(859) 257 – 3101	**Office:** 235 James F. Hardymon Building

Prerequisite:

Overall standing of 3.0, and consent of instructor.

References: (No required textbook)

1). Data Mining --- Concepts and techniques, by Han and Kamber, Morgan Kaufmann, 2006. (ISBN:1-55860-901-6)
2). Principles of Data Mining, by Hand, Mannila, and Smyth, MIT Press, 2001. (ISBN:0-262-08290-X)
3). Introduction to Data Mining, by Tan, Steinbach, and Kumar, Addison Wesley, 2006. (ISBN:0-321-32136-7)
4). The Elements of Statistical Learning --- Data Mining, Inference, and Prediction, by Hastie, Tibshirani, and Friedman, Springer, 2001. (ISBN:0-387-95284-5)
5). Pattern Recognition and Machine Learning, by Christopher M. Bishop, 2006.

Grading

This is a three credit-hour course; the student should expect to spend, on average, six to nine hours per week in addition to meetings on study and development. The meetings will focus on discussing difficult elements of the project and discussing the student's progress. The final write-up and presentation at the end of the semester will summarize the project outcomes and student's accomplishments. The final presentation is in the form of a formal seminar presentation.

Meeting and Discussion	50%

Presentation	20%
Project Report	30%

Academic Conduct Expectations

Students are expected to complete all assignments independently. Honest and ethical behaviors are always expected. There will be no tolerance for plagiarism or other academic misconduct. The minimum punishment is an E grade that cannot be removed by the repeat option. You may read U.K. Student Rights and Responsibilities at http://www.uky.edu/StudentAffairs/Code for a detailed description.