

CISC 841 Bioinformatics

Spring, 2006

Final Project

Goals

The final project is an essential part of this course (40% of the grade). It is intended to let you get a feel about doing research in bioinformatics. While you are allowed to choose a topic broadly, I have suggested the following three:

- 1) protein homology detection and classification;
- 2) structural features identification and prediction;
- 3) biological networks inference.

A list of recent publications on these topics is provided at <http://www.cis.udel.edu/~lliao/cis841s06/reading.html>.

The project comprises of two stages. The first stage is to read literature on a selected topic and present to the class. The second stage is to do some research on the selected topic, such as an experimental, comparative study of different methods and datasets, improvement of existing methods, or development of new methods.

Logistics

You can work on the project in a team of 2~3 people. Team members should make efforts to select closely related papers for the stage one. You must email me by **March 31** about which paper you select to present and by **April 18** who are your team member(s) for the stage two. Each presentation of the stage one has 35 minutes. For stage two, team projects have 30 minutes each, and single-person projects have 20 minutes each. In all cases, Power point slices should be emailed to me one day before. A final project report, documenting your work and results, is required and is due on (midnight) **May 17th**. Instructions of preparing the final report are available at: <http://www.cis.udel.edu/~lliao/cis841s06/instructions4writeups.txt>

Evaluation

For stage one, evaluation is mainly focused on if you understand well the paper and whether you present the work clearly. For stage two, in addition to evaluating your presentation, we will be also looking for the following:

- i. Originality of thought
- ii. Novelty of findings
- iii. Significance
- iv. Clarity