

Course: CS5961/6951
Instructor: R. F. Riesenfeld
Date: 15 Mar 2011
Due: Thu, 31 Jan 2010

Computational Statistics

Sp 2011

Assignment: *Final Project Topic and Plan*

- A. With due consideration toward your interests, hobbies and other pursuits, propose a topic for a final course project.
 - a. Inasmuch as this is a course about statistics, it is a requirement that the topic somehow give rise to an analyzable dataset, which will become the focus of your final project.
 - b. Discuss the data that you anticipate using, and its potential source, which may be either external or personally gathered.
- B. The project should involve some statistical analysis surrounding the topic you have chosen. Having selected a topic, consider that statistical questions that you wish to probe. With this in mind, formulate a candidate *null hypothesis*, and describe how testing the null hypothesis will offer insight into the questions that have captured your interest.
 - a. Remember that the null hypothesis becomes the center of the statistical analysis. Sometimes directly answering the question of interest is impossible or not practical, so one has to be clever and resourceful in formulating a somewhat obliquely related null hypothesis. This is part of the art of statistical analysis.
 - b. Recall that the null hypothesis will be judged TRUE or FALSE within some margin of statistical error, typically a *Level of Confidence* surrounding the computed result. The greater the level of confidence, the more rigorous the analysis procedure is required to be.
- C. Submit the above in pdf form, as per details at the bottom of class webpage.