Stat 591B:
Concentration Inequalities and Empirical Process Methods
for High-Dimensional Statistics
Autumn 2017

Time: 12:00 - 1:30 T Th (lecture)
Place: Padelford C301
Professor: Jon A. Wellner
Office: B320 Padelford
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Office Hours: 1:30 - 3:30 MWF; or by appointment


Prerequisites: Stat 581-2-3 or Stat 521-2-3, or comparable,
and an interest in high-dimensional statistics.

Grading: (Cr/NC) Homework: 40%
Project: 60%
Course Web site: http://www.stat.washington.edu/
/jaw/COURSES/EMPIR/591.17/591-f17.html

Homework: Homeworks will be roughly once every two weeks ... and will cover theory,
methods, and computations supplementing the lecture material. Here is the tentative
schedule for the homeworks:
HW1: handed out 5 October; due 19 October.
HW2: handed out 19 October; due 2 November.
HW3: handed out 2 November; due 16 November.
HW4: handed out 16 November; due 30 November.

Class projects: Typical projects might include:

- Read a theory paper and write 5-10 pages on the results of the paper, the methods
  used, and the problems remaining.

- Evaluate the use of concentration inequalities in a statistics or probability paper of
  interest to you.

- Survey a set of concentration inequalities or empirical process methods not covered
  in the lectures.
Those of you taking the course for credit should decide on a potential project by Tuesday, October 17. Projects related to your current research are encouraged. Please write a one-two paragraph proposal describing your project to be submitted in class on Tuesday, October 17. I will schedule presentations of projects for the last two weeks of the quarter.

Other books and sources:


Policies regarding phones and computers: Cell phones should be turned off (or set to vibrate only) during class. Likewise for laptop computers. Use class time to understand the lectures and take part in discussions.