Large Data Analysis, STAT:4740  
Spring 2018

1 General Information

Instructor:  Kate Cowles, 374 SH, 335-0727
            kate-cowles@uiowa.edu
Office hours:  T  9:30 - 10:20 p.m.
              W  12:30 - 1:20 p.m.
              Th  1:30 - 2:20 p.m.
Instructor:  Suely Oliveira, 101H MLH, 335-0731
            suely-oliveira@uiowa.edu
Office hours:  M,W,F  2:30 - 3:30
Please:  email to make appointments to see us outside of office hours;
         you also may send questions by e-mail.
TA:  Ben Lim, 348 SH
      hongbeng-lim@uiowa.edu
Office hours:  M  11:30 - 12:15
              Th  10:00 - 10:45
Department:  Statistics and Actuarial Science, 241 SH
DEO:  Joe Lang, 241 SH, 335-0712
      joseph-lang@uiowa.edu
Lectures:  T  1140 Lib  8:00 - 9:15
Labs:  some Thursdays  1140 Lib  8:00 - 9:15

2 Course goals and objectives

Current areas that deal with problem of Big Data; techniques from computer science,
mathematics, statistics; high performance and parallel computing, matrix techniques, clus-
ter analysis, visualization; variety of applications including Google PageRank, seismology,
Netflix-type problems, weather forecasting; fusion of data with simulation; projects.

3 Evaluation of students

3.1 Attendance

Attendance will be taken at every required meeting (lectures, labs, and presentations).
Attendance will count for 20% of the course grade.
3.2 Homework

Homework should be submitted electronically through the ICON submission tools for this course (icon.uiowa.edu). Show your work when solving written homework problems. Complete code and output must be submitted for computer problems.

You are encouraged to study with others. However, if you do work with others on homework assignments, please: a) write up your own assignment and make sure you completely understand all solutions that you submit, and b) write the names of the others in your study group on your assignment.

Late homework is accepted only as required by university policy, i.e. due to “illness, mandatory religious obligations, or other unavoidable circumstances or University activities.”

3.3 Projects

- Each instructor will offer 3 or 4 project topics.
- Students must sign up for first and second choice of project topic by Tues. Mar. 7.
- Instructors will announce project groups on by Fri. Mar. 10.
- Each group will arrange to meet with its project mentor during the week of Mar. 20 and at least every two weeks thereafter.
- Each group will submit a progress report in the ICON dropbox by Tues. Apr. 11.
- Each group will submit their final project report in the form of slides and code in the ICON dropbox by Tues. Apr. 25.
- Oral presentations of group projects will be held on Apr. 25 and 27 and May 2 and 4.

3.4 Grading

The course components will be weighted as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>20%</td>
</tr>
<tr>
<td>Homework and labs</td>
<td>30%</td>
</tr>
<tr>
<td>Project</td>
<td>50%</td>
</tr>
</tbody>
</table>

Grading will be on a curve, with +/− grades used. A grade of A+ represents exceptional work and rarely is awarded.

4 College of Liberal Arts and Sciences: Policies and Resources

The CLAS policies and procedures are stated at the following link: