CS898 - Technological Solutions to Social Problems of Computers (Tentative Outline) Winter 2017

Prof. Robin Cohen

Time and location: DC2568, Mondays 1030am-1220pm

The purpose of this course is to work with a modest-sized class of graduate-level computer science students in order to develop a sensitivity to various social issues arising from computerization and to develop deep and detailed approaches to mitigate some of the negative impacts from computerization that pose a threat to society.

This course will be restricted to computer science students only, with a class size limited to 16.

The course will be organized as follows. After a preliminary introduction, four distinct subtopics will become the focus of the discussion, each one being explored, in turn. For each subtopic, there will be a week of readings and discussion, to serve as a grounding. From here, students will work in small groups (of 3 or 4) to develop technological solutions to the specific problem. Each group will submit a written project and do a brief oral presentation as well (10 minutes, all members speaking). The class will then cycle onto the next subtopic and the required tasks will repeat, as above. Students will be required to complete an individual project on a subtopic that is distinct from the ones already addressed within the course, which will mirror the requirements of the other subtopics: background reading will be analyzed, a central problem will be posed and then a specific technological approach to cope with the problem will be introduced. Students will be able to supplement their work for the individual project with user studies or surveys, as well. These final projects will be presented during the final classes of the term. There will be time for general reflection on the course as well.

Workload

Class participation 10
Written group projects 40 (10 x 4)
Individual project 40
Individual presentation 10

Oral group presentation: will be judged as weak, good or excellent to adjust the written project score for that topic by -.5, 0 or +.5

Schedule

This is a tentative outline for the course.

- January 9 ... Introduction to course; Introduction
- January 16 ... Open Discussion on Value-Centric Design (view the video)
 Organizing into groups
- January 23 ... Open Discussion on Topic 1
 Time for groups to meet Topic 1 projects
- January 30 ... Topic 1: Cyberbullying

 Group presentations with discussion; Topic 1 projects due
- February 6 ... Open Discussion on Topic 2

 Time for groups to meet Topic 2 projects
- February 13 ... Topic 2: Improving Social Media Environments
 Group presentations with discussion; Topic 2 projects due
 [I will propose moving this class to Feb 10 830am-1020am due to a conflict]
- February 20 ... Break Week
- February 27 ... Open Discussion of Topic 3

 Time for groups to meet Topic 3 projects
 - March 6 ... Topic 3: Gender Imbalance in Computer Science Group presentations and discussion; Topic 3 projects due
 - March 13 ... Open Discussion of Topic 4
 Time for groups to meet Topic 4 projects
 - March 20 ... Topic 4: The Digital Divide
 Group presentations and discussion; Topic 4 projects due
 - March 27 ... Individual Presentations
 - Apr 3 ... Individual Presentations Course Wrap Up
 - April 4 ... (NO CLASS) Individual Projects due (4pm)

 Hardcopy to be placed in my CS mailbox (and softcopy sent)