

CS898 - Technological Solutions to Social Problems of Computers Winter 2014

Prof. Robin Cohen

Time and location: Mondays 11-1 DC2568

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 (or 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 class 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: (most likely) 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 6 ... Introduction to course; Introduction
- January 13 ... Open Discussion of Topics 1 and 2
Organizing into groups
- January 20 ... Invited Speaker and impromptu brainstorming afterwards
Computerization of health information
Time for groups to meet - Topic 1 projects
- January 27 ... Topic 1: Cyberbullying
Group presentations with discussion; Topic 1 projects due
- February 3 ... Invited Speaker and impromptu brainstorming afterwards
Computers and the green agenda
Time for groups to meet - Topic 2 projects
- February 10 ... Topic 2: Social Media Overload
Group presentations with discussion; Topic 2 projects due
- February 17 ... Break Week
- February 24 ... Open Discussion of Topics 3 and 4
- March 3 ... Topic 3: Copyright Protection on the Web
Group presentations and discussion; Topic 3 projects due
- March 10 ... Value-centric design and responsibility of computer scientists
Time for groups to meet - Topic 4 projects
- March 17 ... Topic 4: The Digital Divide
Group presentations and discussion; Topic 4 projects due
- March 24 ... Individual Presentations
- March 31 ... Individual Presentations
Course Wrap Up
- April 2 ... (NO CLASS) Individual Projects due (4pm)
Hardcopy to be placed in my CS mailbox