

Note: This syllabus may represent a past offering of this course and future course offerings may differ.

HCDE 548: Advanced Topics in HCDE

“Crowds and Crowdsourcing: Exploring the Dynamics of Connected Crowd Work”

Instructor: Kate Starbird
Quarter/Year: Autumn 2012
Course Schedule: Mondays and Wednesdays; 1:30-3:20PM

Course Description

From microwork marketplaces to crisis mapping communities, socio-technical systems that leverage the power of the remote, connected crowd are becoming increasingly prevalent. Across application domains from t-shirt design to citizen science to humanitarian response, crowd workers are being tapped to solve problems that can neither be solved in conventional organizational configurations nor with purely computational solutions. In this seminar, we will explore this phenomenon, often referred to as crowdsourcing.

We will begin by delving into the history of crowdsourcing, exploring examples of distributed crowd work that precede the digital age. Using this as background for a critical examination of modern systems that leverage the crowd (e.g. Mechanical Turk, Wikipedia, Ushahidi, reCAPTCHA), we will work to unpack the popular “crowdsourcing” term—revealing its roots in open source principles and outsourcing business models, and exploring related concepts of collective intelligence, wisdom of crowds, and human computation. We will analyze existing frameworks for characterizing crowd work, and work to develop our own understanding of what the significant features of crowd work are and how they map to different kinds of socio-technical configurations.

Course Objectives

To develop knowledge about crowdsourcing and related forms of connected crowd work (e.g. collective intelligence, wisdom of crowds, human computation) through explorations of the evolution and history of, current applications for, and emerging legal and ethical issues within the emerging phenomenon.

To consider crowdsourcing within the broader academic fields of human-computer interaction and computer-supported cooperative work.

To critically engage with, discuss, and develop argumentation around the concept of crowdsourcing/crowd work.

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Grading and Assignments

Readings: We will be reading several papers (or chapters) each week, approximately 2-4 readings per class. There is some flexibility during the latter part of our schedule, so some readings are not yet determined. These will be posted at least two weeks beforehand on the course website. Readings, when not available through UW libraries, will be available through the e-reserves.

20% Class Participation

40% Reading Responses: For each set of readings, you will be assigned a reading response. For some of these responses (including the first assignment), you will be asked to write a longer response to a given question or with a specific theme.

Other assignments will follow a standard format:

- 1 page response for EACH reading (multiple chapters of the same book count as one reading). 11-point font.
- Your name.
- Bibliographic citation for the work.
- 1 paragraph summary of themes, author viewpoint, etc.
- 1-2 paragraphs of critical analysis and/or commentary on how the work fits into your research.
- 2-3 questions for the class discussion.

Reading updates and response instructions for themed responses will be announced during class and posted on the course website.

Responses should be submitted in person, in class, in hard copy.

20% Presentation – Seminar Facilitation: Each student will choose one seminar date and theme for which they will prepare material and either present it to the class (15-20 minutes with Q&A) or facilitate class discussion on the selected theme. Each topic will take ½ of the seminar time for that day. You can select from suggested topics (which may mean you'll need to present on a specific date) or can choose a related topic of your own. You will also select and assign 1-2 readings for that date (I can help!). **See Google Doc to sign-up:** bit.ly/PtbE0k (You'll need to send a request for access).

20% Final Paper: There will be a 6-10 page research paper due the final week of class. This paper can be in one of three formats:

- 1) Critical analysis of a topic related to crowd work.
- 2) Research paper or proposal for future work.
- 3) Description of a design for a novel crowd work application with motivating research.

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Course Schedule

Week, Day	Seminar Topic(s)
Week 1, M	Syllabus and Defining Crowdsourcing
Week 1, W	Crowdsourcing According to Howe
Week 2, M	Roots and Relatives of Crowdsourcing: Collective Intelligence & Wisdom of Crowds
Week 2, W	Roots and Relatives of Crowdsourcing: Back to the Future
Week 3, M	Roots and Relatives of Crowdsourcing: Collective Intelligence—Swarm Intelligence vs. Conscious Collective Production
Week 3, W	Roots and Relatives of Crowdsourcing: Human Computation
Week 4, M	Crowdsourcing without a Net
Week 4, W	Crowdsourcing Salon: From Collaborative Creation to Collaborative Filtering
Week 5, M	Crowdsourcing Salon: From Citizen Journalism to Citizen Science
Week 5, W	Crowdsourcing at CHI & CSCW
Week 6, M	Turksourcing
Week 6, W	*Student Defined Topics
Week 7, M	*Student Defined Topics
Week 7, W	*Student Defined Topics
Week 8, W	Crowd Work in Crisis Response
Week 9, M	Crowd Work in Crisis Response
Week 9, W	TBD
Week 10, M	*Student Defined Topics
Week 10, W	*Student Defined Topics
Week 11, M	Frameworks for Characterizing Crowd Work
Week 11, W	What's next? Beyond Crowdsourcing?