

Carnegie Mellon University: 05-320 / 05-820 Fall 2013
The Social Web: Content, Communities, and Context

Class: Tue Thu, 9:00-10:20

Room: NSH 1305

Course site: <https://sites.google.com/site/hciisocialweb/home>

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Course Description

With the growth of online environments like Twitter, Facebook, World of Warcraft, Wikipedia, blogs, online support groups, and open source development communities, the web is no longer just about information. This course will examine a sampling of the social, technical, and business challenges social web sites must solve to be successful and help them understand the social impact of spending at least part of their lives online. Note that the course is not designed to teach students the technical skills needed to analyze, design or build online communities, but a term project provides the opportunity to students who want to build a social site.

This class is open to advanced undergraduates and graduate students with either technical or non-technical backgrounds. Course work will include lectures and class discussion, homework, class presentations, and a group research or design project.

Required Texts

There are no required texts for this course. There will be readings assigned for each class, most of which will be available online. Some of these readings are on the ACM digital library, which means that you have to access the URL from campus or use VPN to log in ([here is info about CMU's VPN software](#)). Others may require access to a password protected directory. We will provide the user id and password for that directory in class.

Note that this class is heavy on reading. [Here are some suggestions](#) for helping you read efficiently and effectively.

Grading

Your final grade in this course will be based on:

- 30% Posts and comments on course discussion forum

- 30% Class attendance and participation and discussion leading
- 40% Final project

Cheating and plagiarism will not be tolerated. Students caught cheating or plagiarizing will receive no credit for the assignment on which the cheating occurred. Additional actions -- including assigning the student a failing grade in the class or referring the case for disciplinary action -- may be taken at the discretion of the instructors.

Class Attendance and Participation

A good portion of the learning in any upper level class comes from intelligent discussion involving the instructor and the students. If you don't attend class, you cannot participate, and your performance in the class may reflect that. This portion of your grade will consist of:

- The instructors knowing your face and name
- Participating in in-class exercises
- Asking interesting questions
- Contributing to class discussion (think quality, not quantity)

We expect that each student will make an effort to attend all lectures and contribute constructively to the discussion.

Keep your laptops closed in class unless you are taking notes. Do not use your laptop in class to read email, chat on IM or surf the web unless you are examining a site relevant to the immediate class discussion. You learn less when you multi-task, interfere with fellow students who are actively participating in class and are disrespectful to the instructors.

Let us know in advance if you have interviews or trips to conferences. The instructors' judgment of your class participation will influence your final grade.

Course Final Project

Students will work on semester projects in groups of four to six that include students with a variety of areas of expertise.

Each project group will propose a project. Although your project can be on any topic related to the course, we anticipate there will be three main types of projects:

1. The design and implementation of a social web site (i.e. an implementation-oriented project).
2. A hypothesis, implementation and evaluation to improve one or more facets of an existing social site (e.g., a focus experiment).
3. An analysis of one or more existing social sites is able to gain insight into how those web sites are used or how they manage to be successful (i.e., an empirical analysis of an existing site). This analysis can either be quantitative (e.g., the role that physical location plays in a social networking site) or qualitative (e.g., the impact of a social support site on its members).

Groups with ideas for other types of projects should discuss them with the professors before submitting their project proposals. A key element in any of these projects is to relate your work on these we are covering in course readings and discussion. More details about the project will be posted soon.

Summary

Each student needs to:

- Each week, do the assigned course readings
- Attend class and participate in discussions
- For the semester, do a course project (with groups formed later in the semester)

Syllabus

(You need to log in the ACM library to access some readings. Please add your name to the readings you would like to lead [here](#))

Week 1: Introduction and Contributions (Aug 27, 29)

Levy, S., & Stone, B. (2006, Apr 3). The new wisdom of the web. Newsweek. [\[link\]](#)

Kelly, Kevin (2005, Aug). We are the web. Wired Magazine. [\[link\]](#)

Week 2: Wisdom of Crowds (Sep 3, 5)

Stephens-davidowitz,(2013, Aug. 9) Dr. Google will see you now, New York Times. [\[link\]](#)

Surowiecki, J. (2005). The Wisdom of Crowds: Why the many are smarter than the few and how collective wisdom shapes business, economies, societies and nations little. New York: Doubleday. (Chapter

1). [\[link\]](#)

Sunstein, C. R. (2006) Infotopia. Oxford University Press. Please read Chapter 3 Four big problems. [\[link\]](#)

Week 3: Newcomers and Socialization (Sep 10, 12)

Lampe, C., and E. Johnston, 2005 'Follow the (slash) dot: Effects of feedback on new members in an online community' in Proceedings of the 2005 international ACM SIGGROUP conference on Supporting Group Work, Sanibel Island, Florida, 11-20. [\[link\]](#)

Bryant, S.L., Forte, A., & Bruckman, A. (2005). Becoming Wikipedian: Transformation of Participation in a Collaborative Online Encyclopedia., in Proceedings, GROUP05, November 6-9, 2005, Sanibel Island, Florida, USA. [\[link\]](#)

Kraut, R. E., Burke, M., Riedl, J., & Resnick, P. (2012). Dealing with Newcomers In R. E. Kraut & P. Resnick (Eds.), Building successful online communities: Evidence-based social design. Cambridge MA: MIT Press. [\[link\]](#)

Week 4: Crowdsourcing (Sep 17, 19)

Kittur, A., Chi, E., Suh, B. (2008). Crowdsourcing user studies with Mechanical Turk. CHI 2008. [\[link\]](#)

Bernstein, M. S., Little, G., Miller, R. C., Hartmann, B., Ackerman, M. S., Karger, D. R., Panovich, K. (2010). Soylent: a word processor with a crowd inside UIST '10 Proceedings of the ACM symposium on User interface software and technology (pp. 313-322). NY: ACM. [\[link\]](#)

Kittur, A., Nickerson, J. V., Bernstein, M. S., Gerber, E. M., Shaw, A., Zimmerman, J., Lease, M., and Horton, J. J. The future of crowd work. In *Proc. CSCW 2013*. [\[link\]](#)

Week 5: Making sense of the social web (Sep 24, 26)

Morris, M.R. (2013) Collaborative Search Revisited. *Proceedings of CSCW 2013*. [\[link\]](#)

Fisher, K., Counts, S., and Kittur, A. Distributed sensemaking: improving sensemaking by leveraging the efforts of previous users. *Proceedings of the 2012 ACM annual conference on Human Factors in Computing Systems*, (2012), 247-256. [\[link\]](#)

Bush, V. (1945, July) As we may think. The Atlantic. [\[link\]](#)

Week 6: Visualizing the social web (Oct 1, 3)

Viegas, F.B., Wattenberg, M., van Ham, F., Kriss, J., McKeon, M. (2007). Manyeyes: A site for visualization at internet scale. IEEE Transactions on Visualization and Computer Graphics, 13 (6), 1121-1128. [\[link\]](#)

Heer, J., Bostock, M., Ogievetsky, V. (2010). A tour through the visualization zoo. ACM Queue.
<http://queue.acm.org/detail.cfm?id=1805128> [\[link\]](#)

S. D. Kamvar and J. Harris. We Feel Fine and searching the emotional web. In Proceedings of WSDM-2011. ACM, 2011. [\[link\]](#)

Week 7: Team project presentation 1 (Oct 8, 10)

Week 8: Social Networks and Online Relationships (Oct 15, 17)

Salganik, M., Dodds, P. S. and Watts, D.J. (2006) Experimental study of inequality and unpredictability in an artificial cultural market, Science. [\[link\]](#)

Bakshy, E., Hofman, J., Mason, W. and Watts, D. (2011) Everyone's an influencer: quantifying influence on twitter. Proceedings of the fourth ACM international conference on Web search and data mining. [\[link\]](#)

Burke, M. (2012). Reading, Writing, Relationships: The Impact of Social Network Sites on Relationships and Well-Being. (PhD), Carnegie Mellon University, Pittsburgh, PA. (Chapter 3: Classes of Facebook activity and changes in tie strength). [\[link\]](#)

Week 9: Motivation and contribution (Oct 22, 24)

Ling, K., G. Beenen, P. Ludford, X. Wang, K. Chang, X. Li, D. Cosley, D. Frankowski, L. Terveen, A. M. Rashid, P. Resnick, R. Kraut. 2005. Using social psychology to motivate contributions to online communities. J. Comput.-Mediated Comm. 10(4). [\[link\]](#)

Roberts, J., Hann, I.-H., & Slaughter, S. (2006). Understanding the motivations, participation and performance of open source software developers: A longitudinal study of the apache projects. *Management Science*, 52(7), 984 - 999. [\[link\]](#)

Kraut, R. E., & Resnick, P. (2012). Encouraging online contributions. In R. E. Kraut & P. Resnick (Eds.), *Evidence-based social design: Mining the social sciences to build online communities*. Cambridge MA: MIT Press. [\[link\]](#)

Week 10: Coordination and conflict (Oct 29, 31)

Kittur, A., & Kraut, R. E. (2008). Harnessing the wisdom of crowds in Wikipedia: Quality through coordination. In CSCW'08: Proceedings of the ACM conference on computersupported cooperative work. New York: ACM Press. [\[link\]](#)

Kittur, A., Suh, B., Pendleton, B. A., Chi., E. (2007). He Says, She Says: Conflict and Coordination in Wikipedia. CHI 2007: Proceedings of the ACM Conference on Human-factors in Computing Systems. New York: ACM Press. [\[link\]](#)

Dibbell, j. (1993) A Rape in Cyberspace or How an Evil Clown, a Haitian Trickster Spirit, Two Wizards, and a Cast of Dozens Turned a Database Into a Society, *The Village Voice*, pages 36 through 42, text available <ftp://ftp.lambda.moo.mud.org/pub/MOO/papers/VillageVoice.txt>. [\[link\]](#)

Week 11: Distributed innovation (Nov 5, 7)

Yu, L. and Nickerson, J.V., Cooks or Cobblers? Crowd Creativitythrough Combination. In ACM Conference on Human Factors in Computing Systems (CHI'11). ACM Press. [\[link\]](#)

K. Luther, C. Fiesler, and A. Bruckman. (2013). "Redistributing Leadership in Online Creative Collaboration." CSCW '13: Proceedings of the 2013 ACM Conference on Computer Supported Cooperative Work. [\[link\]](#)

Travis, J. (2008). Science by the Masses. *Science*, 319(5871), 1750. [\[link\]](#)

Week 12: Team project presentation 2 (Nov 12, 14)

Week 13: Privacy and the social web (Nov 19, 21)

Tsai, J. Egelman, S., Cranor, L., & Acquisti, A. (2007). The Effect of Online Privacy Information on Purchasing Behavior: An Experimental Study. 6th Annual Workshop on "Economics and Information Security"

(WEIS 2007), Pittsburgh PA, 7-8 June 2008. [[link](#)]

Y. Wang, S. Komanduri, P. Leon, G. Norcie, A. Acquisti, and L. Cranor. I regretted the minute I pressed share: A qualitative study of regrets on Facebook. In SOUPS, 2011. [[link](#)]

Boyd, d. Making Sense of Privacy and Publicity. SXSW talk 2010. [[link](#)]

Week 14: Mobile social (Nov 26, 28 Thanksgiving holiday)

(We will discuss the readings on Tuesday)

Guest lecturer: Justin Cranshaw

Mitchell, T. M. (2009). Mining our reality. *Science*, 326(5960), 1644. [[link](#)]

Eagle, N., Pentland, A. S., & Lazer, D. (2009). Inferring friendship network structure by using mobile phone data. *Proceedings of the National Academy of Sciences*, 106(36), 15274-15278. OR Eagle, N., & Pentland, A. (2006). Reality mining: sensing complex social systems. *Personal and Ubiquitous Computing*, 10(4), 255-268. [[link](#)]

Justin Cranshaw, Raz Schwartz, Jason I. Hong, and Norman Sadeh. The Livehoods Project: Utilizing Social Media to Understand the Dynamics of a City. ICWSM 2012. Also, try out the site at <http://livehoods.org/> [[link](#)]

Week 15: Online games (Dec 3, 5)

The life of the Chinese gold farmer. *New York Times*. [[link](#)]

Ducheneaut, N., Yee, N., Nickell, E., & Moore, R. J. (2006). "Alone together?" Exploring the social dynamics of massively multiplayer online games. In *CHI 2006: Proceedings of the ACM conference on human-factors in Computing systems*. NY: ACM Press. [[link](#)]

Nardi, B. and Harris, J. (2006) Strangers and friends: Collaborative play in World of Warcraft. *CSCW*. [[link](#)]

The final presentation (Dec 9)

Mon., 1:00p.m.- 4:00p.m. MM A14 (turn in your final paper by email before 12am)