ICS 669: Social Computing | Spring 2018

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Description

Social computing is an umbrella term for technologies and virtual spaces that allow users to create, describe and share content, and for the communities that arise around them. The goal of this course is to survey theoretical and practical instances of social computing, compare them with traditional professional equivalents, and evaluate how these diverse perspectives can inform one another.

Course structure

This is an online, asynchronous course. It is designed for graduate students who have a high level of internal motivation to extend their knowledge about social computing and related topics, and who will take full advantage of the opportunity to work both independently and in virtual groups. In keeping with the social nature of the course, staying current and participating actively and regularly in an online environment is critical.

We may have students from as many as eight different degree programs in this course. Though no specific technical background is required, you should be comfortable navigating different sites, harvesting and analyzing data, teaching yourself new technologies, and both asking for and offering help.

We will use Slack (**ics669-s18.slack.com**) as the primary hub of the course. The course will be conducted as a series of seven two-week sessions, loosely organized by topic. Following an introductory one-week session zero where you familiarize yourself with Slack and make an introductory post, each session will follow this general pattern:

First week: On Monday, I will post the session's readings--which may change from those listed on the syllabus--on Slack, with a related assignment. The latter will usually take the form of questions to address and/or sites to visit and evaluate. Respond to the assignment in the appropriate session's Slack channel. Your response to the assignment must be posted by 11:59 pm Sunday, i.e. in one week.

Second week: Read as many of your fellow students' Slack posts as you like, but comment substantively on at least two per session by Friday of the second week. Respond to any comments you receive and otherwise conclude your conversations over the weekend.

As you can see, this course structure relies critically on people posting on time, so **late posts will be penalized a minimum of two points, up to a maximum of the point value of the late assignment.**

Another friendly but serious reminder: don't plagiarize. Copying, adapting or otherwise borrowing ideas without proper citation will be considered a violation of the UH Mānoa Student Conduct Code (<u>http://studentaffairs.manoa.hawaii.edu/policies/conduct_code/</u>) relating to academic honesty, and will result in an F in the course, and other consequences.

Assignments

Slack assignments and comments (70%)

(10 points X 7 sessions)

Each session's Slack assignment will be based on the readings, and all will have different expectations. All Slack posts should:

- Begin with an informative one-sentence headline that summarizes your response to the assignment, and encourages people to read further. Resist the temptation to post clickbait headlines (e.g. Six ways to conquer troll-#4 will surprise you!).
- Post approximately 500 words, or the equivalent of two double-spaced pages, in response to each assignment. Make sure to address every required element.
- Post approximately 150-200 words as a substantive comment to two other students' posts each session. To distribute comments as evenly as possible, comment on posts that don't yet have two comments.
- You are encouraged to use an informal writing style, as long as required content is addressed, and it is clear which course readings and concepts you are referencing.
- Post your assignments as text with links and/or screenshots within each session's Slack channel (e.g. #session1). Do not upload .docs or .pdfs.

Though I can't comment on every post, throughout the course I will provide individual feedback on your contributions via Slack within one week after each session, based on the guidelines below:

- **10/10**: Demonstrates excellent understanding of concepts from readings by challenging, critiquing and/or applying concepts in an insightful way--not just summarizing. Addresses all aspects of the assignment in depth, and may go beyond the guidelines of the assignment or link concepts across sessions. Comments to other students are clear, timely, substantive, non-obvious and actionable. They're encouraging, funny, thought-provoking, challenging when appropriate, and they know how to disagree effectively, in the spirit of making the work being discussed as good as it can be. They aren't focused on counting words or posts just to meet assignment guidelines--they post with purpose, respond reliably and respect other students' time. Tl;dr version: in any online community, there are people whose posts and replies you look forward to. Be one of those people and you can get all the points.
- **9/10:** As above, no required assignment or comment elements are missing, though there are some weaker areas.
- **8/10:** As above, though one required assignment or comment element may be missing or not addressed in sufficient depth.
- **7/10:** Demonstrates understanding of some readings, may summarize some concepts instead of challenging, critiquing or thoughtfully applying them. Two or more assignment or comment elements are missing or not addressed in sufficient depth. Comments to other students are unclear, late, obvious and/or nonspecific (e.g. that's interesting!), with few if any actionable suggestions.
- 6/10 or lower: We'll talk.

Final project: Design an online community (30%)

- **Project proposal due Sunday March 11** (ungraded—address each bullet point below with a few sentences for feedback, though you do not need to have your complete citation list at this point)
- Final project writeup due Friday May 4

For the final project, you will apply the social computing concepts you have learned throughout the course and propose a detailed design of an online community. You are encouraged to work in teams of two or three. Assignment expectations will vary according to the number of group members and the specifics of the proposed project--we will negotiate these individually as feedback to your project proposal. As a starting point, you will be expected to critically and insightfully address questions like:

- Who is the target audience? How can they be identified and represented online?
- Which of their information needs can be addressed via social computing? Why do you think so?
- How will you design effective interactions? Include three use scenarios focusing on the interactions you feel are most critical to your community.
- Which specific functions will you adapt (or avoid adapting) from other social computing systems? Why?
- Which concepts from the course readings are you using as examples (or counterexamples) to ground your design decisions? Formally cite at least ten.
- How will you encourage initial and continuing contributions?
- How do members signal identity, expertise, trustworthiness, etc.? Which qualities are important to them and why?
- How do members move from content consumers to content creators?
- How will you incorporate new community members?
- How will you collect and analyze the data on the site to evaluate its effectiveness?
- How will you define, communicate and enforce appropriate community behavior?

98-100 A+ | 93-97 A | 90-92 A- | 88-89 B+ | 83-87 B | 80-82 B- | 78-79 C+ | 73-77 C

Schedule and readings (subject to change)

Session 0: Introduction Monday January 8 – Sunday January 14

Join the ics669-s18.slack.com workspace, subscribe to all course channels and familiarize yourself with Slack. Use the #random channel to experiment with line breaks, links, attachments comments and anything else.

By Sunday January 14, 11:59pm complete the session's readings and Slack post assignment:

Read:

- <u>Kraut & Resnick (2014)</u>. Chapter 1: Introduction. Available through Hamilton library. Kraut, Robert E., Resnick, Paul, et al. (2014). Building Successful Online Communities: Evidence-Based Social Design. MIT Press.
- Bernstein, Michael S., Ackerman, Mark S., Chi, Ed H. and Miller, Robert C. (2011). The trouble with social computing systems research. Proceedings of the ACM Conference on Computer-Human Interaction (CHI 2011), 7-12 May, Vancouver, BC, Canada.
- Bogost, Ian (2013). <u>Hyperemployment, or the Exhausting Work of the Technology User</u>. The Atlantic.
- Lampinen, Airi, et al. (2017). Friendly but not Friends: Designing for Spaces Between Friendship and Unfamiliarity. Proceedings of the ACM International Conference on Communities and Technologies (C&T 2017), 26-30 June, Troyes, France.

Session 0 assignment

Post in your Slack profile:

- A well-considered picture or image that will represent you to other students throughout the course.
- In the "What I do" section, describe yourself using no more than 10 words.

Post in the #session0 channel:

• Some informal reactions to the readings (a paragraph or so is fine). These will not be graded. Feel free to respond to other students' posts, though this isn't required for this session.

Session 1: Participation motivations and models Monday January 15 – Sunday January 28

By Sunday January 21, 11:59pm, complete the session's readings and Slack post assignment:

- <u>Kraut & Resnick (2014)</u>. Chapter 2: Encouraging Contribution to Online Communities
- Hoffmann, Christian Pieter, and Lutz, Christoph (2017). Spiral of silence 2.0: Political selfcensorship among young Facebook users. Proceedings of the ACM Conference on Social Media and Society (SMSociety 2017), 28-30 July, Toronto, Ontario, Canada.
- Posey, C., Lowry, P., Roberts, T. et al. (2010). <u>Proposing the online community self-</u> <u>disclosure model: the case of working professionals in France and the U.K. who use online</u> <u>communities.</u> European Journal of Information Systems 19(2), 181-195.
- Arif, Ahmer, et al. (2017). A closer look at the self-correcting crowd: Examining corrections in online rumors. Proceedings of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2017), 25 February-1 March, Portland, OR.

Session 1 Assignment

Throughout Chapter 2 of Kraut & Resnick, the authors propose 35 "design claims" they suggest will result in greater participation within online communities. In the #session1 channel, post:

- Design claim support: Discuss one design claim that you feel is supported by observations you make within one social computing environment, and show us (with links/screenshots) why you think so.
- Design claim critique: Discuss a second design claim that you feel is challenged or contradicted by observations you make within a different social computing environment, and show us (with links/screenshots) why you think so.
- Concept comparison and extension: The Hoffmann, Posey and Arif papers discuss online self-disclosure, though in different ways. Briefly summarize one idea from each paper that you found interesting, and speculate about how implementing these ideas could inform the design of an interface element that doesn't currently exist in one of the specific social computing environments you discussed above.

Remember, be sure your post is substantive enough to demonstrate your understanding of the relevant concepts from the papers you cite.

By Friday January 26, 11:59pm: Comment substantively on two other students' posts. You may want to comment on posts where the authors engaged with some of the same design claims as you did, but feel free to engage with anyone who hasn't yet received two comments on their post.

By Sunday, January 28, 11:59pm: Conclude your discussions.

Session 2: Signaling, credibility and trust Monday January 29 – Sunday February 11

Session 2 assignment will be posted on Slack Monday Jan 29

Tentative readings:

- Butler, Oobah (2017). <u>I made my shed the top-rated restaurant on TripAdvisor</u>. Vice.com, 6 December 2017.
- Cheshire, Coye (2011). Online trust, trustworthiness, or assurance? Daedalus 140(4), 49-58.
- Donath, Judith (2007). <u>Signals in social supernets</u>. Journal of Computer Mediated Communication 13(1), article 12.
- Mayer, Julia M., Richard P. Schuler, Quentin Jones (2012). Towards an understanding of social inference opportunities in social computing. Proceedings of the ACM International Conference on Supporting Group Work (GROUP 2012), 27-31 October, Sanibel Island, FL.
- Mitra, Tanushree, Wright, Graham P., and Gilbert, Eric. (2017). A parsimonious language model of social media credibility across disparate events. Proceedings of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2017), 25 February-1 March, Portland, OR.

Session 3: Why we stay Monday February 12 – Sunday February 25

Session 3 assignment will be posted on Slack Monday Feb 12

Tentative readings:

- <u>Kraut & Resnick (2014)</u>. Chapter 3: Encouraging Commitment to Online Communities
- Bornfeld, Benny, and Rafaeli, Sheizaf (2017). <u>Gamifying with badges: A big data natural</u> <u>experiment on Stack Exchange</u>. First Monday 22(6).
- Liu, Jason, Weitzman, Elissa R., and Chunara, Rumi (2017). Assessing Behavioral Stages from Social Media Data. Proceedings of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2017), 25 February-1 March, Portland, OR.
- Madrigal, Alexis C. (2017). <u>The education of Mark Zuckerberg</u>. The Atlantic.

Session 4: Peer production and collaborative work Monday February 26 – Sunday March 11

Session 4 assignment will be posted on Slack Monday Feb 26 Final project proposal due Sunday Mar 11

Tentative readings:

- Ardini, Amalia, et al. (2016). Social computing for software engineering: A mapping study. Computer Science Review 13/14, 75-93.
- Haythornthwaite, Caroline (2009). <u>Crowds and communities: Light and heavyweight</u> <u>models of peer production</u>. Proceedings of the 42nd Hawaii International Conference on System Sciences, (HICSS 2009), 5-8 January, Waikoloa, HI.
- Katz, Miranda (2017). <u>Searching for lost memories under thousands of microscopes</u>. Wired Backchannel, 27 September 2017.
- Tamburri, Damian A., et al. (2015). <u>Social debt in software engineering: insights from</u> <u>industry</u>. Journal of Internet Services and Applications 6(10).

Session 5: Antisocial computing Monday March 12 – Sunday March 25

Session 5 assignment will be posted on Slack Monday Mar 12

Tentative readings:

- Kraut & Resnick (2014). Chapter 4: Regulating Behavior in Online Communities
- Gazan, Rich (2016). <u>Seven words you can't say on Answerbag: Contested terms and</u> <u>conflict in a social Q&A community</u>. Proceedings of the 27th ACM Conference on Hypertext and Social Media (HT 2016), 10-13 July, Halifax, Nova Scotia, Canada.
- Kirman, Ben, Linehan, Conor and Lawson, Shawn (2012). Exploring mischief and mayhem in social computing or: How we learned to stop worrying and love the trolls. Proceedings of the ACM Conference on Computer-Human Interaction (CHI 2012), 5-10 May, Austin, TX.
- Kumar, Srijan, West, Robert and Leskovic, Jure (2016). Disinformation on the Web: Impact, characteristics, and detection of Wikipedia hoaxes. Proceedings of the ACM World Wide Web Conference (WWW 2016), 11-15 April, Montreal, Quebec, Canada.
- Kumar, Srijan, Cheng, Justin, Leskovec, Jure and Subrahmanian, V.S. (2017). An Army of Me: Sockpuppets in Online Discussion Communities. Proceedings of the ACM World Wide Web Conference (WWW 2017), 3-7 April, Perth, Australia.

Spring Break Monday March 26 – Sunday April 1

Session 6: Online community evolution Monday April 2 – Sunday April 15

Session 6 assignment will be posted on Slack Monday Apr 2

Tentative readings:

- <u>Kraut & Resnick (2014)</u>. Chapter 5: The Challenges of Dealing with Newcomers
- Kao, Jeff (2017). <u>More than a million pro-repeal net neutrality comments were likely</u> <u>faked</u>. Hacker Noon, 23 November 2017.

Session 7: Online community design Monday April 16 – Sunday April 29

Session 7 assignment will be posted on Slack Monday Apr 16

Tentative readings:

- <u>Kraut & Resnick (2014)</u>. Chapter 6: Starting New Online Communities
- Crockett, M.J. (2017). <u>Moral outrage in the digital age</u>. Nature Human Behaviour 1, 769-771.
- Pentzold, Christian, et al. (2017). Digging Wikipedia: The online encyclopedia as a digital cultural heritage gateway and site. ACM Journal on Computing and Cultural Heritage 10(1), Article 5.

Final project writeup Due Friday May 4