Sociotechnical Systems Research:
Defining, Converging, and Researching as a Community

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Abstract

The Consortium for the Science of Sociotechnical Systems (CSST) serves as a trans-discipline community, connecting like-minded scholars from many different intellectual communities. CSST brings together researchers from a wide range of disciplines to develop a common language and scholarly repertoire as we work to understand diverse sociotechnical issues. Researchers focus on improving human lives through understanding sociotechnical systems, conducting research on human activity such as collaboration, creativity, learning and economic production in domains like healthcare, education, science, leisure, and computing. This requires researchers to understand both social and technical aspects of human organization. This workshop supports continued advancement of definitions and boundaries in this area. We will engage in activities with established leaders as well as newcomers in this trans-discipline, to build understanding of factors that support the community's cohesion, and, aim to leverage the diversity of the work being conducted by its members, to engender learning and research innovation.

Keywords: socio-technical systems research, consortium for the science of socio-technical systems, CSST

Introduction

For four years, the Consortium for the Science of Socio-Technical Systems' (CSST) annual Summer Research Institute has offered an intensive program of exploration and discovery to educate and build community among successive cohorts of socio-technical systems researchers. Recurring workshops at the 2009, 2010, 2011, and 2012 iConferences have likewise provided a regular venue for researchers to convene and share their interests in socio-technical issues within the iSchool community.

The 2013 CSST iConference Workshop, now under the auspices of an NSF Research Coordination Network, builds on this tradition of sharing and community building by offering a full-day workshop to help both new and more seasoned socio-technical scholars to identify research opportunities, stimulate future collaborations, and contribute to the evolution of the larger socio-technical field of scholarship.

Overview

The first half of the workshop will be targeted towards newcomers as an introductory session that demystifies analytical approaches common in socio-technical work such as social shaping of technology (SST), social construction of technology (*SCOT*), actor network theory (ANT), social informatics,

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sociomateriality, and design. The second half of the workshop will involve hands-on group activities centered around identifying research gaps and potential funding streams, applying research methods, building common resources, and determining protocols for continued community building.

The workshop will provide a unique opportunity for sharing problems and results amongst a growing research community. The workshop will help to identify opportunities, stimulate future collaborations, and contribute to the evolution of sociotechnical research. Three goals motivate the proposal for this workshop:

1) To inspire sociotechnical researchers with stories of success in outcomes and impact.
2) To identify new areas of opportunity for sociotechnical researchers.
3) To promote the sociotechnical field of research to newcomers, by reviewing its origins, summarizing its successes as a community, and communicating the current state of the field, which offers greater clarity on its definition and conceptual boundaries of this approach.

Notes, speaker presentations, and possibly video will be disseminated on the workshop's website in order to reach outside of the group of workshop attendees.

With the current funding climate and the increasingly competitive publication sphere, questions of impact are pervading the sociotechnical discipline. With this conference we aim to identify previous successes and opportunities for future successes in order to provide a firm foundation for researchers to continue in this realm of work. As sociotechnical researchers are most closely aligned with the iSchools (as demonstrated by our large workshop attendance in the last several years) we would like to spur the next year of research and grant writing at the iConference.

All participants are asked to prepare a 1-page executive summary brief of their research agenda, and bring 15 copies.

Draft Agenda

Duration	Topic
8:30-9:00	Informal self-introductions over coffee and pastries
9:00-10:30	Individual Speaker Session: Case studies of exemplary work in socio-technical systems research • 9:00-9:15, Brief introduction to agenda, co-organizers 3 presentations: • 9:15-9:45 Speaker 1, Bonnie Nardi, Professor in the Department of Informatics in the Donald Bren School of Information and Computer Sciences at the University of California, Irvine (confirmed) • 9:45-10:15 David Ribes, Assistant Professor in the Communication, Culture & Technology Program at Georgetown University (confirmed) • 10:15-10:45 Third speaker TBD
10:45-11:00	Coffee Break
11:00-12:15	Master Class, linking features of the case examples to the "socio-technical system" domain of scholarship: • Steve Sawyer, Associate Dean for Research, Professor, Syracuse University School of Information Studies to facilitate • 11-11:45 Moderated panel discussion among the earlier speakers drawing out the sociotechnical themes in their work. o Includes small group rubric activity: Identify the socio-technical elements of the earlier research exemplars • 11:45-12:15 Open Q & A and dialogue

12:15-1:30	Lunch with Groups Discussion Prompts: • What challenges are you facing in your research? • This is a great time to bring this to a small group to get some feedback from your colleagues.
1:30-3:00	Mapping domains and terrains within pre-determined groups • Groups sit together at tables, organized based on pre-survey analysis. • Share 1-page summary that all participants will pre-prepare. • Address a range of discussion prompts addressing morning sessions, areas of convergence and divergence in personal research agendas, how can our research be more critically oriented, areas of challenge, opportunity, funding, publication • Half of the groups present summaries (organizers will offer structure for the presentations)
3:00-3:15	Coffee Break
3:15-4:45	Continuation, Mapping domains and terrains within pre-determined groups • Second half of the groups present discussion summaries (organizers will structure this) • Synthesis by newer faculty / advanced Ph.D. students / organizers • Intellectual Geography activity o What did we learn in the grouping activity that might bear weight for the socio-technical systems community as a whole?

4:45-5:00/
5:15
	Final wrap-up and sharing time.
	
	• Collect feedback from the participants on the day's events, debrief with attendees. Collect participant feedback on how we should use the new Socio-tech website going forward.
	• Co-organizers present any announcements/updates
	• Brainstorm ideas for future events:
	   o Paper editing workshops
	   o Webinars
	   o Creating a discussion board on the sociotechnical systems website
	   o How to better leverage social media for our community