Abstract
This one-day workshop brings together HCI scholars and practitioners who share a common interest in understanding and exploring how we will be socially connected in the future. Central to our discussion will be the exploration of an interdisciplinary research agenda in social interaction design (SxD) that merges social networks and socially generated data with a vision for materiality in computing and the possibilities of tangible and embedded interaction.

Keywords
Social media; interaction design; socially generated data; social networks; materiality; tangible and embedded interaction

The Changing Fabric of Sociability
Social media and services are increasingly pervading our everyday life and reconfiguring the fabric of our social interactions. As computing moves into the background and into smart objects and environments, designed interaction becomes embedded into everyday materials and artifacts. A scenario whereby socially meaningful data are captured and networked connections are generated on the basis of our
embodied interactions in physical spaces is conceivable in the near future.

HCI and interaction design have for some time focused on bridging the gap between digital interaction and the material aspects of artifacts and environments. Much research has explored new possibilities for translating embodied forms of expression into rich digital ones. As well as this, work has been done to embed digital information into interactive artifacts to populate our everyday world.

In parallel to this, in areas such as CSCW, social computing and the semantic web, there has been an exploration of how people can perform socially significant interactions through digital means. Social media in particular has created a new vocabulary of digital social interactions that frames interpersonal communication and the social sharing of personal data.

In this workshop, we aim to explore how these two lines of enquiry are and could be further linked towards a "Social Interaction Design" (SxD) that merges social data, social networks, and socially sensitive interactions with a vision for materiality in computing.

**Intended Contributions of Social Interaction Design**

As HCI researchers and interaction designers, we need a broader vocabulary and additional practical resources for designing with social data and networked connections in ways that are rich, meaningful and interwoven with the fabric of everyday life. As interaction designers, we need to embrace the fluid social practices of connectivity. On the other hand, we also need to facilitate "lived and felt" interactions with the social and material contexts where socially generated data are produced and shared, rather than just ‘adding’ social data over the material world as a flat layer of information and media content. Understanding how to weave the digital and the material into a fabric of sensorily rich, personally meaningful, and socially sustainable interactions are the major challenges for designers (media, products, services) that we wish to explore.

By bringing together participants from areas as diverse as design research, humanities and social sciences, technology development and service design, we can facilitate mutual learning and exchange and expand research within HCI by promoting connection to those already working on sociability outside and around the field.

**Relevant Topics**

Dourish [1] characterize the development of social computing through three distinctive "waves:" a first wave focused on virtual communities (e.g., chat rooms, MUDs, online environments, etc.); the second wave focused on large-scale collaborative actions (e.g., online games, virtual worlds, micro-blogging, social networking platforms, etc.); and the third wave focused on the integration of social and collaborative digital tools and everyday life. In the workshop, we aim to explore the links between such a "third wave" of pervasive social interactions and the possibilities offered by tangible and embedded computing.

Specifically, the workshop will address the following three topics:
Technologies
We are interested in technologies that allow us to bring socially generated data and networked connections closer to the material fabric of everyday living. These include technologies and interaction modalities that enable to: (a) sense and reveal the interweaving of the social with the physical world; (b) expose the material affordances of social networks and/or the social affordances of the physical world; (c) capture and socially index new types of data sets (e.g. quality of movements in public spaces); and (c) allow people to feel, express and mediate sociability in ways that are intimate and sensorily rich.

Social and Cultural Practices
In addition to identifying specific technologies and interaction modalities, we are interested in understanding how technological systems condition and reconfigure social life, and how they could be appropriated and used to reconnect sociability to the material and intimate fabric of everyday living. We will also discuss how individuals and communities keep themselves socially connected through either material or digital practices, and how these practices reflect each other (or not). Topics include ethnographic, sociological, socio-cultural, historical, and critical analyses.

Emerging Design Issues
In light of emerging technologies, media substratum, and service infrastructures and foreseeable changes in the fabric of sociability, we are also interested in discussing: What is the design space for social interaction design? What contextual aspects need to be considered in design practice? What is the role of material properties and perceptual qualities in designing socially meaningful interactions? How can we recast the relationship between media, products and services?

By addressing these topics, we expect to gain critical and practical insights on how research on social and collaborative computing (e.g. awareness, disclosure, coordination) and on social network analysis can be linked to new forms of materiality in interaction. Similarly, research in interaction design will be contrasted that has looked at social connectedness as presence and at how the feeling of being in a connection can be conveyed or highlighted by design. Finally, the potential and limitations of emerging technologies and technological infrastructures will be integrated in the discussion.

Related research HCI areas we see as having a potential bearing on the workshop topics include, but are not limited to: social computing; social media; social network analysis; data mining; tangible and embedded interaction; wearable computing; organic interfaces; natural interaction (e.g. skin-based inputs); sensing technologies and infrastructures.

A Research-Through-Design Approach to the Workshop Activities
Informed by a “research-through-design” approach, the workshop activities will combine pecha kucha presentations by participants, designed activities, and critiques of design results, with the goal to encourage reflection and forward-thinking while working on inspiration drawn from participants’ current work.

Inspired by the pecha kucha presentations, participants will create a “wall” of ideas to feed design activities.
Mimicking social media, an actual “wall” will be created with adhesive cards and used to prompt design activities around a specific technology or vision. We will use cards designed to resemble “news feeds”, as an explicit reflection on the workshop itself as an instantiation of social activity.

Community-building activities will take place before the workshop (i.e., information sharing and online conversations) to facilitate activities on the day.

Participants are expected to:

- Generate concepts and low-fi prototypes that explore potential design futures;
- Use the generated concepts and prototypes to discuss critical themes and emerging issues in relation to mediated social practices and novel interaction modalities and interfaces;
- Explore conceptual frameworks and design methods and techniques that could be effective for social interaction design;
- Reflect on the broader methodological implications of practicing social interaction design, both conceptual and practical.

**Target Audience**

We welcome HCI scholars and practitioners from diverse areas of expertise, including: ethnographers, humanists, social computing and CSCW researchers, interaction designers, computer scientists and technologists working on sensing technologies, organic interfaces or natural interaction (e.g. skin based inputs), and artists/practitioners involved in the making/programming of new materials and behaviors (e.g. nanotechnologies, wearable computing, electronic textiles, Internet of Things).

**Envisioned Outcomes**

The workshop will explore design futures and identify critical themes at the intersection of social computing, interaction design and HCI research. It will also discuss how to incorporate methods and approaches derived from (for example) social media, service design and other areas (depending on the background of participants) in HCI and interaction design practice, and vice versa.

Outcomes of the workshop will be: (a) a map of current work on bridging social computing with tangible and embedded interaction; (b) an agenda of themes and considerations aimed at shaping a broader vocabulary for HCI design research on sociability; and (c) the creation of an informal network of scholars and practitioners interested in fostering collaborative research and design opportunities within this emerging area. Planned follow-up activities will ensure that the results are promoted and consolidated.

**References**