## **Call for papers**

# CSCW Journal Special Issue: CSCW, Technology and Diagnostic Work

Editors: Monika Buscher; Jacki O'Neill, John Rooksby

#### **CALL FOR PAPERS**

When we think of diagnostic work, often the first domain to come to mind is healthcare. However, *practices of noticing and categorising trouble and of defining the scope for remedial action* span many domains. For example, diagnostic work also takes place in software and hardware troubleshooting, engineering, emergency work, detective work, coaching, hospitality work, piano tuning, and quality control. Broadening the analytical focus can leverage important insights for the design and use of CSCW technologies.

Although frequently conceived of as a 'moment' of individual cognition, diagnosis is often a material, collaborative process. It requires careful sensory and sensitive engagement with other people (e.g. in healthcare, teaching, policing or customer service), resourceful and iterative probing of information technology (e.g. debugging code, playing a video game) and manipulation of material objects (e.g. fixing a printer jam). Some activities involve rational everyday knowledge, others demand scientific practices, representation and calculation, and some call for emotional and intuitive ways of knowing. Moreover, technology use pervades diagnostic work, mediating or facilitating it. Increasingly, technologies are used in remote diagnostic practices, for example, for bomb disposal, environmental monitoring, healthcare, or for customer support from one of a myriad of call centres. And local diagnosis also often relies on technological support, for example to alert people to problems, to help assess their nature, to locate solutions, to communicate diagnostic reasoning and so on.

Diagnostic practices are a pervasive and important feature of contemporary life. They matter, not least because it is through diagnostic work that different perspectives (e.g. novices and experts, users, developers and designers) meet. Technologies meant to support diagnostic work can interfere with the everyday practices, organizational structures and skills involved, both positively and negatively. For this Special Issue of the Journal of Computer Supported Cooperative Work we invite contributions that explore key dimensions of this dynamic relationship to inform the design and use of CSCW technologies, including questions around:

- \* *Collaboration*: Diagnosing is often a collaborative endeavour. How is collaboration organised and sustained? Is it made visible or invisible? How? How do participants 'calibrate' for varying degrees of competence? What technologies are used and how? How could technologies support collaboration?
- \* *Human-matter engagement*: Engagement with physiological or material agencies entails skills of human-matter 'communication'. People use technologies that translate, amplify, or otherwise document material activities. They use thresholds, patterns and alarms. How do (or don't) such technologies help people in making matter 'speak'? How do they 'sit' with the collaborative dynamic of diagnostic work?
- \* *Human-technology engagement*: The states and processes of many of the technologies meant to support diagnostic work themselves are hard to notice, inspect, 'diagnose', let alone 'debug'. How do people understand and make the most of these technologies? How do they notice and exploit affordances and address breakdown?

In this special issue of the Journal of Computer Supported Cooperative Work we seek to analyze the collaborative practical accomplishment of technologically mediated or facilitated diagnostic work. We particularly invite studies of domains outside of healthcare. Regardless of the domain studied, authors must clearly address what constitutes diagnostic work within the context of their study, they must clearly describe the collaborative nature of diagnostic work and the opportunities and challenges that technologies in general and CSCW technologies in particular raise. Papers may focus on:

- \* studies of technologically mediated and/or facilitated diagnostic work
- \* critiques and analysis of existing technologies in use in diagnostic practice
- \* descriptions of concepts or designs of new technologies for diagnosis

Submissions should be 6000-8000 Words, and follow the Springer guidelines for authors, available at

http://www.springer.com/uk/home?SGWID=3-102-70-35755499-0&changeHeader=true&SHORTCUT=www.springer.com/journal/10606

### Schedule:

Submission deadline:	18 April 2008
Review Reports:	21 June
Submission deadline for completed, revised manuscripts:	30 July 2008

## **Contact:**

m.buscher@lancaster.ac.uk jacki.oneill@xrce.xerox.com rooksby@comp.lancs.ac.uk