

"Crisis Informatics:

A Multidisciplinary Approach to Understanding Civic Participation and Addressing Challenges in Emergency Response"

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Crisis informatics addresses socio-technical concerns in large-scale emergency response. Additionally it expands consideration to include not only official responders (who tend to be the focus in policy and technology-focused matters), but also members of the public. It therefore views emergency response as an expanded social cognition system where information is disseminated within and between official and public channels and entities. Crisis informatics wrestles with methodological concerns as it strives to develop new theory and support informed development of information and communications technology (ICT) and policy.

In this talk, I propose a paradigm-shifting perspective: that innovation for emergencies could benefit by reframing emergency management as a set of socially-distributed information activities that support powerful, parallel, socio-technical processing of problems in times of change and disruption. I discuss the implications of such a view for scientists, technologists, emergency management, and members of the public. To that end, I will present results from our empirical research on the vast computer mediated interaction (over Facebook, Twitter, blogs and so on) that has occurred during recent disaster events. I will demonstrate how variants on existing methodological approaches are necessary for sampling and studying "social media" content in disaster events to get an accurate assessment of content. I will discuss the new roles of the "on-line converger" and "technical volunteers" that have emerged during that January 2010 Haiti earthquake, and how those roles will play an increasingly important part in the future of emergency management.

Short Bio:

Leysia Palen is a member of the Computer Science faculty at the University of Colorado, Boulder and a faculty fellow with the Institute of Cognitive Science (ICS). Her training and interests are socio-technical, with a focus on ethnographic studies of ICT use, social cognition and social computing. She has published several articles and an edited book on the social aspects of ICT in a variety of everyday and safety-critical contexts. In 2006, Professor Palen was awarded a US National Science Federation Early CAREER Grant to study information dissemination in disaster events. She and her colleagues were recently awarded a new National Science Foundation grant for their work on "Project EPIC: Empowering the Public with Information in Crisis."

Prior to her appointment at Colorado, she completed her PhD at the University of California, Irvine in Information and Computer Science, and her undergraduate education in Cognitive Science at the University of California, San Diego. In 2005-2006, Professor Palen was a visiting professor at the University of Aarhus, Denmark in the Center for Interactive Spaces and the Center for Pervasive Healthcare.