## Collaborative Technology and Environments J.UCS Special Issue

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Collaborative technology and environments have always raised the attention of researchers with various backgrounds and a wide range of interests. System developers, technology designers, cognitive engineers and social scientists find themselves challenged by the complexity and tremendous possibilities raised by the technological support to groups and communities of users making joint efforts toward a common goal.

And new problems continue to emerge as we find new application areas for collaborative technology. This special issue presents research in quite different application areas: healthcare virtual communities, agile software development, collaborative modeling and online chat communities.

This special issue is comprised of selected, extender and peer-reviewed papers presented at the 14th Collaboration Researchers' International Workshop of Groupware (CRIWG 2008), held in Omaha, Nebraska, USA, September 14-18, 2008. Four papers have been accepted after a rigorous process where each submitted manuscript passed two rounds of reviews by at least three specialists in the field.

## Contents of this issue

The first paper, entitled "Assisting Support Groups of Patients with Chronic Diseases through Persuasive Computing" (Eduardo Gasca, Jesus Favela, and Monica Tentori), reports exploratory research in a compelling and emerging field: healthcare virtual communities. The paper describes the development of a self-supporting healthcare network aiming at promoting healthy lifestyles among patients. The results from the field show that the participants increased confidence in themselves by using the technology.

The second paper, entitled "Understanding Tools and Practices for Distributed Pair Programming" (Till Schummer and Stephan Lukosch), addresses communities of software developers that have adopted the pair-programing approach. The paper analyzes the social practices of distributed pair-programmers, identifying tools and patterns of use. The paper also proposes integrated support to these social practices.

The third paper, entitled "How Interactive Whiteboards can be used to Support Collaborative Modeling" (Gwendolyn L. Kolfschoten, Mamadou Seck, and Gert-Jan de Vreede), provides an extensive review on the use of whiteboards supporting collaborative modeling. Adopting the semi-structured interview approach, the paper obtained data from the field elucidating the importance of group composition, technology support and modeling approaches to practitioners.

And finally, the fourth paper, entitled "Diminishing Chat Confusion by Multiple Visualizations" (Torsten Holmer, Stephan Lukosch, and Verena Kunz), is focussed on a very important problem that plagues the current chat tools: confusion and context losses derived from long chat threads and linear visualization modes. The paper proposes a tool allowing to change visualization modes in runtime. Unstructured interviews were adopted to obtain feedback and validate the approach.

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