

# Augmented Reality Invited Talk

We are pleased to announce

## Through Walls Collaboration

by

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Thursday, June 5<sup>th</sup>, 5:00pm, lecture hall, H7

### Abstract

The focus of this collection of projects is to support users collaborating in an intelligent meeting room with users in the field to view and manipulate data. The through walls collaboration allows users in the field at the problem location to work in real time with users indoors. The users in the field have first hand knowledge and context of the current problem, while the users indoors have access to reference materials, a global picture, and more advanced technology. This task will develop adaptive context aware work environments and their linkage with multiple users through mixed/augmented reality interfaces operating on mobile equipment. Our goal is to identify ways of improving access to information, supporting teamwork, facilitating communications, and allow greater manipulation of information in the field. By linking advanced control rooms to mobile users, the centralized parts of the system can get access to on site information to improve the decision making process.

The focus of this part is however not on the decision support component, which is amply dealt with in the artificial intelligence and expert systems literature, but on the improvement of mixed/augmented reality approaches through integration with advanced control room concepts. As this requires a high degree of flexibility, we base our approach on# adaptive context aware work environments.



### Biography

Dr. Thomas is the current Director of the Wearable Computer Laboratory at the University of South Australia. He is currently a NICTA Fellow, CTO A-Rage Pty Ltd, Member of HxI team, and visiting Scholar with the Human Interaction Technology Laboratory, University of Washington. He is the inventor of the first outdoor augmented reality game ARQuake. His current research interests include: wearable computers, user interfaces, augmented reality, virtual reality, CSCW, and tabletop display interfaces. Dr. Thomas' experience includes working at the School of Computer and Information Science, University of South Australia since 1990. He has run his own computer consultancy company. He was also a Computer Scientist at the National Institute of Standards and Technology, and a software engineer for the Computer Sciences Corporation and the General Electric Company.