

Future Directions for Tomorrow's Interactions

Presenter: Prof Bruce H. Thomas
Director Wearable Computer Lab
NICTA Fellow

Venue: SA Water Lecture Theatre
Mawson Centre
Mawson Lakes Blvd
(Library Building)
Mawson Lakes SA

Date: 15 August 2007, 4:00pm–6:00pm

Abstract

The Minority Report and the Island movies have crystallised the idea of using fresh interaction interfaces, gesture-based interaction and direct manipulation-based interfaces on different surfaces. Interactive tables and walls are becoming increasingly popular, as seen with Microsoft's computing surface. Hefty augmented surfaces are becoming part of our substantial environment and necessitate novel interaction techniques and metaphors. Surrounding superimposed surfaces are becoming our new displays and if they become interactive, we have new possible ways of interaction. Making the interactions with a digital user interface disappears into and becomes a part of the human-to-human interaction and conversation is a challenge. Traditional metaphor and underlying interface infrastructure for single-user desktop systems have been traditionally geared towards single mouse and keyboard-based WIMP interface design. On the other hand, people usually meet around a table, facing each other. A table/wall setting provides a large interactive visual surface. It encourages collaboration, coordination, as well as simultaneous and parallel problem solving among multiple people.

In this talk, I will describe particular challenges and solutions for the design of direct-touch tabletop and interactive wall environments. The talk will focus on the future directions for user interfaces (ideas from a SIGGRAPH course I will be jointly giving) and the current Braccetto project (a joint project with NICTA, DSTO, CSIRO, UniSA, and Uni. Sydney).

Presenter

Professor Bruce H. Thomas is the co-director of the Wearable Computer Laboratory. Prof. Thomas has degrees in computer science, physics and education; these degrees are from Flinders University of South Australia (PhD), University of Virginia (MS), and George Washington University (BA). He first came to the University of South Australia in 1990. He is currently a NICTA Fellow, CTO A-Rage Pty Ltd, and visiting Scholar with the Human Interaction Technology Laboratory, University of Washington. He also is the inventor of the first outdoor augmented reality game ARQuake. Prof. Thomas' current research interests include: wearable computers, user interfaces, augmented reality, virtual reality, CSCW, and tabletop display interfaces. Previously, he has worked in the area of automated manufacturing at General Electric and the National Institute of Standards and Technology, and 3D graphics and user interfaces at the Computer Sciences Corporation. Please visit my personal home page for more information.

Bookings for this Free event Essential

Please RSVP by no later than
8 August, 2007

Phone: (08) 8302 3928

Fax: (08) 8302 3115

Email: industryeducation@nicta.com.au

Format of the Seminar

16:00–17:00 Presentation
SA Water Lecture Theatre
(MC1-02)

17:00–18:00 Drinks and Refreshments
Exhibition Space
(MC1-14)