

## TUTORIAL AND WORKSHOP SUMMARY

	Half day	All Day
<b>Monday 20 November</b>	<b>Tutorial 1</b> - Fieldwork and Interdisciplinary Design - <b>morning</b>	<b>Workshop 1</b> - Virtual Communities
	<b>Tutorial 2</b> - Information Architecture: Theory and Practice - <b>afternoon</b>	<b>Tutorial 3</b> - Designing with the Human Memory in Mind
<b>Tuesday 21 November</b>		<b>Workshop 2</b> - The Object of Interaction
		<b>Workshop 3</b> - Supporting Awareness
		<b>Tutorial 4</b> - Principles of Interaction Design
		<b>Tutorial 5</b> - From Ethnography to Usability Testing: Tools for Data Collection
		<b>Doctoral Consortium</b>

### Tutorial 1 (Monday 20 Nov 9:00am – 12:30pm half day)

#### Fieldwork and Interdisciplinary Design

Authors: [Connor Graham](#), Mark Rouncefield

Presenter: [Connor Graham](#), Mark Rouncefield

Audience: Social science researchers in management, health care and education; commercial researchers and consultants interested in observational studies; system developers; at any level of experience, preferably limited to 10-15 people.

Affiliations: Department of Information Systems, University of Melbourne, Computing Department, Lancaster University

Keywords:

Topics: Design methods, Field studies

The general need for this half day tutorial arises out of the growing importance of "design" in a range of activities and the particular recognition that the commonly recognised, if much hyped, benefits of Information and Communication Technology (ICT) will only materialise if users, usability and dependability are central to the design process. The emphasis is then on design as a socio-technical enterprise. In recent years there has been an expansion of the notion of design to embrace a range of socio-technical issues of varying kinds concerned with spatiality, temporality, sociality and aesthetics. The domains and settings to which "design" and technology is relevant has also expanded to embrace domestic settings, public spaces of various kinds, healthcare etc.

The tutorial we propose will address a range of methodological and technical knowledge, skills, understandings and related issues in fieldwork studies as used in the Social Sciences. In particular it considers a number of advances in sophistication and rigour for conducting fieldwork research, especially in inter-disciplinary projects; developments arising from the incorporation of new or newly relevant disciplines, perspectives and techniques such as art and aesthetics, ethics and design; advances brought about by the need to adopt and adapt existing methodological approaches to new situations, such as public spaces, healthcare and domestic environments and by developing notions of what constitutes "best" practice in fieldwork studies for interdisciplinary research projects.

## Tutorial 2 (Monday 20 Nov 1:30pm – 5:00pm half day)

### Information architecture: Theory and practice

Authors: [Donna Maurer](#)

Presenter: Donna Maurer; Donna is a freelance interaction designer and information architect.

Audience: Advanced introduction that will be adapted to the audience who will be IA practitioners, HCI researchers and professionals, usability specialists and business analysts for information-rich environments.

Affiliations: IAI, CHISIG

Keywords:

Topics: User-centered design, Web design and information architecture

This half-day pre-conference tutorial will provide participants with a thorough overview and understanding of information architecture theory & practice. As a short tutorial it provides a high level understanding of information architecture, outlines the fundamentals, discusses current information architecture issues and challenges and provides some practical experience that can be used immediately in the workplace.

## Tutorial 3 (Monday 20 Nov 9:00am – 5:00pm full day)

### Designing with the Human Memory in Mind

Authors: [Thomas Hewett](#)

Presenter: Thomas Hewett is Professor of Psychology and Computer Science at Drexel University, Philadelphia, USA

Audience: Interaction designers, developers and managers who have found that users have minds of their own and anyone involved with or interested in interactive system design who has not done coursework in cognitive psychology. No background in psychology is assumed.

Affiliations: Department of Psychology, Drexel University, Department of Computer Science, Drexel University

Keywords:

Topics: Models of interaction, Theory and foundation of HCI, User-centered design, HCI education and design education

The focus of this one-day tutorial is on introducing some theoretical and practical aspects of how people remember information. The presentation is highly interactive and relies upon "minds-on" activities supplemented with mini-lectures. Many demonstrations and exercises illustrate different aspects of the workings of long-term memory, of short-term memory, and of the relationships between them. In this tutorial you will gain insights about how to take advantage of some of these capabilities in designing for your most important interaction component, the human mind. You will gain insights into criteria for evaluation of computer-based cognitive support tools, etc. for their compatibility with how human memory actually works. You will also gain insights into how to take personal advantage of improving these capabilities. Extended examples and thought questions in the notes provide illustrations of how the knowledge gained might be applied to design and evaluation of cognitive support systems. Many examples apply to both full size and mobile devices. The approach to the material is reflective and the course is not intended for the person seeking "instant" or pre-packaged solutions for the problems of this week's project.

# Tutorial 4 (Tuesday 21 Nov 9:00am – 5:00pm full day)

## Principles of Interaction Design

Authors: [Shane Morris](#)

Presenter: Shane Morris

Audience: Beginner to intermediate, preferably 8-20 people.

Affiliations: Echo Interaction Design

Keywords:

Topics: Artistic and aesthetic approaches to interface design, Design methods, Models of interaction, Web design and information architecture

Great interaction design requires more than just a methodology. Through years of practice, master interaction designers build up a body of design "intuition" that allows them to rapidly design excellent user interfaces.

This whole day tutorial introduces and explores many of the fundamental principles that underlie the practice of interaction design and user interface design. It is by consciously or unconsciously drawing on these principles that practicing designers are able to efficiently produce excellent designs, and minimise redesign. Nevertheless, apart from some 'heuristics', many practitioners have not been formally introduced to these principles.

This highly interactive tutorial gives participants a "kick start" towards master status by exploring the underlying principles of interaction design through exercises, discussion and examples. Practicing interaction designers will develop their working vocabulary of design principles that can be applied in the design and evaluation of all forms of user interfaces in everyday use - including physical devices, graphical user interfaces and internet applications.

# Tutorial 5 (Tuesday 21 Nov 9:00am – 5:00pm full day)

## From Ethnography to Usability Testing: Tools for Data Collection

Authors: [Jorit Dekker](#), Dr Lucas Noldus, Tobias Heffelaar

Affiliations: SDR Clinical Technology, Noldus (The Netherlands), Lucas Noldus is founder and director of Noldus Information Technology, a developer of software tools and integrated solutions for HCI research and usability testing.

Presenter: [Jorit Dekker](#) works for Noldus and has extensive experience in setting up software and hardware tools for HCI research and usability testing and in training users across the world to work with these tools.

Audience: Usability engineers, UI designers, usability testers who are planning to update or set up new research or test facilities (usability lab, focus group room, tools for ethnography). The course is useful for people working in academic research, corporate human factors departments or independent consulting firms. Novices and experts can benefit in different ways from the course. Max 40 people.

Keywords:

Topics: Usability studies

This whole day tutorial offers participants an intensive course in video technology, software tools and integrated solutions for field and lab studies. After this tutorial you will be completely up to date with the latest proven techniques and tools for data collection and analysis. If your next project is an ethnographical field study, a focus group or a usability lab test, attend this tutorial to learn how to select the right tool for the job and how to put it to optimal use.

Topics:

- Video recording and screen capture, storage and retrieval
- Designing a usability lab
- Observational data collection
- Multimodal measurements
- Qualitative data analysis
- Quantitative data analysis
- Creating usability test reports

# Workshop 1 (Monday 20 Nov 9:00am – 5:00pm full day)

## **Virtual Communities Workshop: Approaches to the Design of Social Software for Dis-Organisations**

Authors: [Alastair Weakley](#), Jeremy Yuille, Markus Rittenbruch, Ralf Muhlberger, Laurene Vaughan

Affiliations: Australasian CRC for Interaction Design (ACID), Creativity & Cognition Studios, University of Technology, Sydney, RMIT, University of Queensland

Keywords:

Topics: Design cases, Design methods, End-user development, Evaluation methods, Participatory design, Studies of organisations, technology and work, Usability studies, User-centered design, Field studies, Multi-user interaction

A fundamental challenge exists for distributed organisations seeking to foster collaboration: understanding and capitalising on the inter-relationships between collaborative tools and techniques to support generation of ideas and innovation. Commercial imperatives underpin research into these inter-relationships, in terms of how to create a culture and environment in which ideation and innovation can flourish.

This one day workshop will address the collaborative needs of organisations that are distributed or otherwise informally structured. In particular we will explore approaches to the design of tools that support increased communication and social interaction within such groups. Traditionally, support systems have been introduced from the top downwards but there is increasing evidence to suggest that alternative approaches can be even more effective. The increasing use of bottom-up, emergent technologies such as wikis and weblogs, which give their users the freedom to communicate unhampered by rigid organisational structures, is a well-known phenomenon. This workshop seeks to address approaches for the design of such tools.

## Workshop 2 (Tuesday 21 Nov 9:00am – 5:00pm full day)

### The Object of Interaction

Authors: [Stephen Viller](#), Matthew Simpson, Laurene Vaughan, Jeremy Yuille, Yoko Akama, Roslyn Cooper

Affiliations: University of Queensland, Australasian CRC for Interaction Design (ACID), University of Queensland, Australasian CRC for Interaction Design (ACID), RMIT University Australasian CRC for Interaction Design (ACID)

Keywords:

Topics: Design cases, Design methods, New interaction techniques and devices, Participatory design, Theory and foundation of HCI, User-centered design

This one day workshop intends to focus on artefacts when exploring the design space between people and context in interaction design. Furthermore, the workshop will explore how 'creative' versus 'engineering' approaches [11] to user centred design lead to different engagement between user, design and context. Many interaction design methods either introduce artefacts, or rely on artefacts drawn from the design context in order to engage users in the design process. For example, in-situ methods such as contextual design [2] engage with users in-context, allowing artefacts that are used there to support discussion between user and designer. Cultural probes [6], on the other hand, have been proposed as a way to generate inspiration for design, by providing potential users with artefacts to provoke or generate responses about their current setting. Playful triggers have also been used to foster a more creative engagement between designer and user [9]. In many cases, the justifications for adopting methods such as probes appeal to the nature of the design context and how the method is appropriate for it, or can be adapted to it [1]. In this workshop we are also interested in the match between method and context, but our focus is on the role that artifacts play in informing or inspiring the design of interactive technologies for particular design contexts.

# Workshop 3 (Tuesday 21 Nov 9:00am – 5:00pm full day)

## Supporting Awareness in Intense Distributed Collaboration

Authors: [Claudia Schremmer](#), Julien Epps, Rudi Vernik

Affiliations: CSIRO ICT Centre, National ICT Australia, DSTO Edinburgh

Keywords:

Topics: Evaluation methods, Information visualization, Innovative interface design, Multimodal interfaces, Studies of organisations, technology and work, Theory and foundation of HCI, Usability studies, User-centered design, Field studies, Multi-user interaction

This one day workshop aims at bringing together researchers that have dealt with or are involved in studying, understanding, measuring and interpreting awareness in technology-mediated collaborations.

In this workshop, we will focus on the concept of awareness in intense distributed collaboration, applied to small teams of co-workers who share their knowledge and artefacts (e.g. documents, designs, plans) across two or more sites in a synchronous manner.

In the workshop we aim to discuss both:

- ❖ Theoretical and methodological awareness concepts, and
- ❖ Practical implications for designing and developing awareness tools.