# CONTENTS

Welcome from the Conference Chair 2  
Conference at a Glance 4  
WEDNESDAY at a Glance 6  
THURSDAY at a Glance 8  
FRIDAY at a Glance 10  
Technical Program 12  
Wednesday 24 November - Detailed Program 13  
Thursday 25 November - Detailed Program 24  
Friday 26 November - Detailed Program 36  
Doctoral Consortium 48  
Demonstrations 49  
Tutorials 51  
Workshops 52  
24 hour Student Design Challenge 55  
Social Program 56  
About The Venue 57  
Housekeeping 58  
CHISIG Committee 59  
OZCHI 2010 Delegates 60  
OZCHI 2010 Reviewers 66  
Student Volunteers 67  
Organising Committee 68
Stephen, Ben, Ricky and Mads have drawn together an excellent technical programme from a competitive pool of submissions. Martin, Truna and Jeremy have pulled together a fabulous Student Design Challenge receiving 24 submissions. Frank and Jillian have created a fine doctoral consortium, receiving 23 submissions, more than I think we have ever had at OzCHI. Michael and Peta have coordinated an excellent workshop and tutorial programme. Steve and Cecile have patiently guided us through the creation of a conference. And Paris and Jon from SecretLab have created an iPhone app so that you can peruse the conference programme by iPhone! Please do try it if you have an iPhone. Thank you all for your many hours of work and support for OzCHI.

Our student and non-student volunteers have been extremely helpful, proactive, cheerful, flexible and skillful, making conference planning a real pleasure and a success! Thank you Fiona, Hadi, Ken, Ellya, Andrew and Lorna for our social events, website, USB proceedings, logos, programme booklet, posters, T-shirts, hats, mugs, errands and for all that you do. Without you, we would be in dire straits. Instead, we are smiling.

Finally, I would like to thank the reviewers and all of you, the participants, for joining us at OzCHI this year. I hope you meet new people, have inspired discussions and enjoy all that OzCHI and Brisbane have to offer.

Margot.

Conference Chair
Margot Brereton, Queensland University of Technology
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 - 09:15</td>
<td>Conference Opening</td>
<td></td>
</tr>
<tr>
<td>09:15 - 10:30</td>
<td>KEYNOTE</td>
<td>B117</td>
</tr>
<tr>
<td>10:30 - 11:00</td>
<td>Morning Tea</td>
<td></td>
</tr>
<tr>
<td>11:00 - 12:30</td>
<td>PANEL</td>
<td></td>
</tr>
<tr>
<td>12:30 - 13:30</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>13:30 - 15:00</td>
<td>Long Papers</td>
<td></td>
</tr>
<tr>
<td>13:30 - 15:00</td>
<td>INTERACTION EXPERIMENTS</td>
<td>B119</td>
</tr>
<tr>
<td>13:30 - 15:00</td>
<td>UNTANGLING COMPLEX DESIGN SITUATIONS</td>
<td>B121</td>
</tr>
<tr>
<td>13:30 - 15:00</td>
<td>ENGAGING EXPERIENCES</td>
<td>B122</td>
</tr>
<tr>
<td>15:00 - 15:30</td>
<td>Afternoon Tea</td>
<td></td>
</tr>
<tr>
<td>15:30 - 17:00</td>
<td>Long Papers</td>
<td></td>
</tr>
<tr>
<td>15:30 - 17:00</td>
<td>DESIGNING SOCIAL EXPERIENCES</td>
<td>B119</td>
</tr>
<tr>
<td>15:30 - 17:00</td>
<td>DESIGN, BUILD, TEST</td>
<td>B121</td>
</tr>
<tr>
<td>15:30 - 17:00</td>
<td>EVALUATING INTERACTIVE TECHNOLOGIES</td>
<td>B122</td>
</tr>
<tr>
<td>19:00 til late</td>
<td>Conference Dinner</td>
<td></td>
</tr>
</tbody>
</table>
### Wednesday at a Glance

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>Conference Opening</td>
<td>B117</td>
</tr>
<tr>
<td>09:15</td>
<td>Keynote: John Seely Brown</td>
<td>B117</td>
</tr>
<tr>
<td>11:00</td>
<td>User Experience of Smart Phones in Mobile Journalism - Early Findings on Influence of Professional Role</td>
<td>B112</td>
</tr>
<tr>
<td>11:15</td>
<td>A Survey on Usage of Mobile Video in Australia</td>
<td>B112</td>
</tr>
<tr>
<td>11:30</td>
<td>Designing for Mobility: Using a Mixed Ideation Approach for Mobile Service Concept</td>
<td>B117</td>
</tr>
<tr>
<td>11:45</td>
<td>On the Implications of Sense of Control over Bicycling: Design of a Physical Stamina-Aware Bike</td>
<td>B117</td>
</tr>
<tr>
<td>12:00</td>
<td>Studying PH.A.N.T.O.M. in the Wild a Pervasive Persuasive Game for Daily Physical Activity</td>
<td>B117</td>
</tr>
<tr>
<td>12:15</td>
<td>Planning Travel as Everyday Design</td>
<td>B117</td>
</tr>
<tr>
<td>13:30</td>
<td>A Project Restarting Support System Using the Historical Log of a User’s Window Usage</td>
<td>B119</td>
</tr>
<tr>
<td>14:00</td>
<td>Interactive Definition of Single-user Profiles for Alerting Systems</td>
<td>B119</td>
</tr>
<tr>
<td>14:30</td>
<td>Multitouch Finger Registration and Its Applications</td>
<td>B119</td>
</tr>
<tr>
<td>15:00</td>
<td>Designing Technology for Active Spectator Experiences at Sporting Events</td>
<td>B119</td>
</tr>
<tr>
<td>15:30</td>
<td>Engagement Networks in Social Music-making</td>
<td>B119</td>
</tr>
<tr>
<td>16:00</td>
<td>Who Makes What Sound? Supporting real-time musical improvisations of electroacoustic ensembles</td>
<td>B119</td>
</tr>
<tr>
<td>16:30</td>
<td>Designing Interactions for the Collective User Experience</td>
<td>B117</td>
</tr>
<tr>
<td>16:45</td>
<td>Document Resizing for Visually Impaired Students</td>
<td>B119</td>
</tr>
<tr>
<td>17:15</td>
<td>CHISIG Annual General Meeting</td>
<td>B117</td>
</tr>
</tbody>
</table>

**Panel:**

Open source, Open learning and Co-creation: Challenges of new CHI practices

**Ethnographic Video as Design Spec**

Heterogeneities and complexities in IS design - Still a need to juxtapose organizational elements and design related ideas?

The Elephant in the Room - Ambiguity and Temporary Closure in a Design Process

Communicative Criteria for Usability Evaluation

User Experience Evaluation Criteria for Mobile News Making Technology - Findings from a Case Study

Event log messages as a human interface, or, “Do you pine for the days when men were men and wrote their own device drivers?”

Research on the Edge - high payoffs but risky.
### Thursday at a Glance

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>Keynote: Elizabeth Churchill</td>
<td>B117</td>
</tr>
<tr>
<td>10:15</td>
<td>Demonstrations</td>
<td></td>
</tr>
<tr>
<td>11:15</td>
<td>Social isolation of older people: the role of domestic technologies</td>
<td>B119</td>
</tr>
<tr>
<td>11:30</td>
<td>Silver Towns and Smart Technologies</td>
<td></td>
</tr>
<tr>
<td>11:45</td>
<td>Older adults, interface experience and cognitive decline</td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td>The lived world of older urban Australians: Relating everyday living to GPS tracking data</td>
<td></td>
</tr>
<tr>
<td>12:15</td>
<td>The effects of cognitive ageing on use of complex interfaces</td>
<td></td>
</tr>
<tr>
<td>12:30</td>
<td>Communities of everyday practice and situated elderliness as an approach to co-design for senior interaction</td>
<td></td>
</tr>
<tr>
<td>13:45</td>
<td>PANEL: Involving Seniors in Co-design An exploration of methodological challenges</td>
<td>B119</td>
</tr>
<tr>
<td>14:15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14:45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15:00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15:45</td>
<td>Keynote: Jacob Buur</td>
<td>B117</td>
</tr>
<tr>
<td>19:00</td>
<td>Conference Dinner</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Fix Restaurant at the Port Office Hotel</td>
<td></td>
</tr>
</tbody>
</table>

### Demos

- Social isolation of older people: the role of domestic technologies
- Silver Towns and Smart Technologies
- Older adults, interface experience and cognitive decline
- The lived world of older urban Australians: Relating everyday living to GPS tracking data
- The effects of cognitive ageing on use of complex interfaces
- Communities of everyday practice and situated elderliness as an approach to co-design for senior interaction

### Methods Bazaar

- Ethnography considered useful situating criticality
- Part Science Part Magic... Analysing the OWL Outcomes
- Dialogic Shifts: The rhythm and sequence of artifacts in aesthetically informed interaction design practice
- Visualizing Digital Media Interactions: Providing feedback on jam2jam AV performances
- Research In and Through Design - An Interaction Design Research Approach
- Using Diaries for Evaluating Interactive Products: The Relevance of Form and Context

### Industry Case Studies

- Making Numbers Count: Tangible UCD
- Enterprise Experience Architecture – root and branch design of online services
- Using participatory design with internal stakeholders to drive product innovation
- Interpreting Technology-Mediated Identity: Perception of Social Intention and Meaning in Bluetooth Names
- What’s My Name Again? Sociotechnical Considerations for Author Name Management in Research Databases
- Reinforcing bad behaviour: the misuse of security indicators on popular websites
- How HCI Design Influences Web Security Decisions

### SustAINable Design

- Chutney and Relish: Designing to Augment the Experience of Shopping at a Farmers’ Market
- Reflecting on Reflection: Framing a Design Landscape
- Curbing Paper Wastage Using Flavoured Feedback
- Householder Experiences with Resource Monitoring Technology in Sustainable Homes

### What’s in a Name, or a Password?

- Interpreting Technology-Mediated Identity: Perception of Social Intention and Meaning in Bluetooth Names
- What’s My Name Again? Sociotechnical Considerations for Author Name Management in Research Databases
- Reinforcing bad behaviour: the misuse of security indicators on popular websites
- How HCI Design Influences Web Security Decisions

### Panels

- Involving Seniors in Co-design An exploration of methodological challenges
<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30</td>
<td>Understanding experience using dialogical methods: The case of serendipity</td>
<td></td>
</tr>
<tr>
<td>10:00</td>
<td>A Methodology to Evaluate Creative Design Methods: A Study with the BadIdeas Method</td>
<td></td>
</tr>
<tr>
<td>10:30</td>
<td>AUXie: Initial Evaluation of a Blind-Accessible Virtual Museum Tour</td>
<td></td>
</tr>
<tr>
<td>10:45</td>
<td>Personality, Motivation and Video Games</td>
<td></td>
</tr>
</tbody>
</table>

**MORNING TEA**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:30</td>
<td>Can Traditional HCI Principles Be Applied to Computing Technology in Learning Contexts?</td>
<td></td>
</tr>
<tr>
<td>11:45</td>
<td>Child-Robot Interaction during Collaborative Game Play: Effects of Age and Gender on Emotion and Experience</td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td>Spelling Bug - Benefits of using adaptive technology for training spelling in primary school classrooms</td>
<td></td>
</tr>
<tr>
<td>12:15</td>
<td>Web Searching Interaction Modal based on User Cognitive Styles</td>
<td></td>
</tr>
<tr>
<td>12:30</td>
<td>User-Web Interactions: How Wholistic/ Analytic Web Users Search the Web?</td>
<td></td>
</tr>
<tr>
<td>12:45</td>
<td>Effect of Topic Domain and Task Type on Web Image Searching</td>
<td></td>
</tr>
</tbody>
</table>

**LUNCH**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30</td>
<td>Lunchtime Roundtable: HCI and the Excellence in Research Australia Initiative - toward a high impact discipline</td>
<td></td>
</tr>
<tr>
<td>14:15</td>
<td>Keynote: Toni Robertson</td>
<td>B117</td>
</tr>
<tr>
<td>15:30</td>
<td>Conference Close</td>
<td>B117</td>
</tr>
</tbody>
</table>

**AFTERNOON TEA**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30</td>
<td>Improving Stylus Interaction for eMedical Forms</td>
<td></td>
</tr>
<tr>
<td>10:00</td>
<td>An Empirical Comparison of Tag Clouds and Tables</td>
<td></td>
</tr>
<tr>
<td>10:30</td>
<td>Interactive Tabletops with Non-Interactive Rims</td>
<td></td>
</tr>
<tr>
<td>10:45</td>
<td>Head or Gaze? Controlling Remote Camera for Hands-Busy Tasks in Teleoperation: A Comparison</td>
<td></td>
</tr>
</tbody>
</table>

**EVALUATING INTERACTIVE TECHNOLOGIES**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:30</td>
<td>User Interface Design for Social/Web Theme and Opinion Analysis</td>
<td></td>
</tr>
<tr>
<td>11:45</td>
<td>Extending design encounters with use of social media</td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td>Tag Clouds as Social Signers</td>
<td></td>
</tr>
<tr>
<td>12:15</td>
<td>Social Music Services in Teenage Life - A Case Study</td>
<td></td>
</tr>
<tr>
<td>12:30</td>
<td>Geovisualisation: Sense-making and knowledge discovery with location-based data</td>
<td></td>
</tr>
<tr>
<td>12:45</td>
<td>ReGroup: Using Location Sharing to Support Distributed Information Gathering</td>
<td></td>
</tr>
</tbody>
</table>

**LEARNING & SEARCHING**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30</td>
<td>Lunchtime Roundtable: Teaching HCI as a design discipline - sharing ideas, tricks and challenges</td>
<td></td>
</tr>
<tr>
<td>14:15</td>
<td>Keynote: Toni Robertson</td>
<td>B117</td>
</tr>
<tr>
<td>15:30</td>
<td>Conference Close</td>
<td>B117</td>
</tr>
</tbody>
</table>

**CO-PRESENCE & REMOTE COLLABORATION**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30</td>
<td>Conversational Management of Network Trouble Perturbations in Personal/Videoconferencing</td>
<td></td>
</tr>
<tr>
<td>10:00</td>
<td>Investigating Factors influencing Trust in Video-Mediated Communication</td>
<td></td>
</tr>
<tr>
<td>10:30</td>
<td>Supporting Collaborations across a Biocontainment Barrier</td>
<td></td>
</tr>
<tr>
<td>10:45</td>
<td>Being There With Others: Copresence and Technologies for Informal Interaction</td>
<td></td>
</tr>
<tr>
<td>11:30</td>
<td>Interaction, Privacy and Profiling Considerations in Local Mobile Social Software: a Prototype Agile Ride Share System</td>
<td></td>
</tr>
<tr>
<td>11:45</td>
<td>Fear and Danger in Nocturnal Urban Environments</td>
<td></td>
</tr>
<tr>
<td>12:00</td>
<td>eParticipation as an Information Ecology - a micro-scale examination of two cases in Helsinki</td>
<td></td>
</tr>
<tr>
<td>12:15</td>
<td>Iterative Design within a Local Community Communication Fabric</td>
<td></td>
</tr>
<tr>
<td>12:45</td>
<td>Aligning Research and External Stakeholder Agendas in Collaborative Interaction Design Projects</td>
<td></td>
</tr>
<tr>
<td>13:30</td>
<td>Collective Sensor Networks and Future Communities: Designing Interaction across Multiple Scales</td>
<td></td>
</tr>
</tbody>
</table>

**INTERACTION IN COMMUNITIES**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30</td>
<td>Lunchtime Roundtable: Convene a roundtable for a topic of interest to you</td>
<td></td>
</tr>
<tr>
<td>14:15</td>
<td>Keynote: Toni Robertson</td>
<td>B117</td>
</tr>
<tr>
<td>15:30</td>
<td>Conference Close</td>
<td>B117</td>
</tr>
</tbody>
</table>

Power to the people! Human centred design as a basic human right.

We would like to thank the authors for their excellent contributions to the conference this year. The diversity of topics, approaches and countries of origin demonstrates how wide-ranging human-computer interaction research, and OZCHI is. We would also like to thank all of the reviewers on the program committee who provided valuable and constructive feedback to the authors and the program chairs. The high standard of the proceedings is due to the hard work of everyone who submitted a paper and everyone who contributed review. The Gitte Lindgaard award, which is awarded at every OZCHI for the best paper presented at the conference, will be selected by a panel of attendees. The award presentation will take place after the conference closing keynote.

We hope all participants enjoy the conference, beautiful Brisbane and sunny Australia!

Program Chairs
Stephen Viller & Ben Kraal

---

**KEYNOTE: John Seely-Brown | Research on the Edge - high payoffs but risky.**

John Seely Brown is a visiting scholar and advisor to the Provost at the University of Southern California (USC) and the Independent Co-Chairman of the Deloitte Center for the Edge. Prior to that he was the Chief Scientist of Xerox Corporation and the director of its Palo Alto Research Center (PARC), a position he held for nearly two decades. While head of PARC, Brown expanded the role of corporate research to include such topics as organizational learning, knowledge management, complex adaptive systems, and nano/mems technologies. He was a cofounder of the Institute for Research on Learning (IRL). John, or as he is often called JSB, is a member of the American Academy of Arts and Sciences, the National Academy of Education, a Fellow of the American Association for Artificial Intelligence and of AAAS and a Trustee of the MacArthur Foundation. He serves on numerous public boards (Amazon, Corning, and Varian Medical Systems) and private boards of directors. He has published over 100 papers in scientific journals.

In 2004 he was inducted in the Industry Hall of Fame. His current book, The Power of Pull, co-authored with John Hagel was released April 13, 2010. With Paul Duguid he co-authored the acclaimed book The Social Life of Information (HBS Press, 2000) that has been translated into 9 languages with a second edition in April 2002, and with John Hagel he co-authored the book The Only Sustainable Edge which is about new forms of collaborative innovation. In addition, his book The New Culture of Learning co-authored with Professor Doug Thomas at USC, will be released late 2010. JSB received a BA from Brown University in 1962 in mathematics and physics and a PhD from the University of Michigan in 1970 in computer and communication sciences. He has received five honorary degrees including; May 2000, Brown University, Doctor of Science Degree; July 2001, the London Business School, Honorary Doctor of Science in Economics; May 2004, Claremont Graduate University, Honorary Doctor of Humane Letters; May 2005, University of Michigan, Honorary Doctor of Science Degree, and May 2009, North Carolina State University, Honorary Doctor of Science Degree.
A Survey on Usage of Mobile Video in Australia
Wei Song & Dian Tjondronegoro, Queensland University of Technology

The growth of powerful entertainment functions of mobile devices, in particular mobile video, has recently attracted much attention. Studies on mobile TV, one form of mobile video, have been conducted in many countries. However, little research focuses on the holistic usage of mobile video. To understand the features of such usage, we conducted an online survey in Brisbane, Australia, during the first half of 2010. Our findings reveal similarities and diversities between usage of mobile TV in particular and mobile video on the whole. The results could aid in improving the design of future studies, with a view to ultimately increase user satisfaction.

Designing for Mobility: Using a Mixed Ideation Approach for Mobile Service Concept
Xiantao Chen, Beijing University of Posts and Telecommunications; Nokia Research Center Beijing, China; Ying Liu & Xia Wang, Nokia Research Center Beijing, China

Mobile services increasingly play important roles in everyday life. Designing novel concepts for mobile service is facing several challenges in ideation methodology. This paper presents a mixed ideation approach that combines the improved brainstorming and in-situ role playing for exploring new mobile service concept. Based on the proposed ideation approach, designers can come up with ideas in a traditional way and enrich and polish them by using role playing as a way of involving users. A design case is presented in detail using the mixed ideation approach. Not only the design case shows in detail how the proposed approach is utilized but also the presented design results show its effectiveness.

On the Implications of Sense of Control over Bicycling: Design of a Physical Stamina-Aware Bike
Chao-Lung Lee, Da Lee, Yun-Maw Cheng, Tatung University, Frode Eika Sandnes, Oslo University College, Li-Chieh Chen & Wei-Chia Chen, Tatung University

Bicycling has become a mainstream activity among the environmental aware generation. Bicycling communities have gradually shown interests in quantitative data of the bicycling experiences such as road roughness, inclination, pollution, etc. Bikers utilize these data to infer the possible stamina cost and quality of surroundings. This supports them to make a better decision. This study assumes that fitness level indexed by stamina cost could enhance a biker’s sense of control. The prototype in this paper was developed to provide stamina cost information, which is inferred from the terrain patterns of a biking route. In the system evaluation, participants took a positive attitude toward this prototype and approved the importance of stamina cost feedback. This paper also concluded several key issues about designing the stamina cost feedback system for bikers.
A pervasive persuasive game, PH.A.N.T.O.M., has been designed and developed to increase the daily exercise level of the players. The idea is to embed the physical activity into a fun and engaging mobile game experience. This is combined with a storyline and virtual game setting integrated into the everyday life of the players to add a sense of purpose for them to get outside and be active. This paper reports from a field study with nine participants which was conducted to evaluate the user experience of the game in the wild and investigate the persuasive nature of it.

This paper examines the implications of conceptualising planning as a type of design activity. This is explored through results from a two month field study that investigated the planning and decision making behaviour of people engaged in preparing for multipoint, international air travel. Planning travel is a type of ill structured complex problem that is characterised as being temporally sporadic, sometimes synchronous, often asynchronous, frequently collaborative, and spatially varied with participants at different times co-located and in separate places. Research participants were professional travel agents and non-professional but experienced travel planners. Ancillary material collected included photographs of the planning situation and drawings and notes made by participants. In contrast to the formalised prescriptive planning models common in cognitive science and operations research, the planning situation and drawings and notes made by participants. In contrast to the formalised prescriptive planning models common in cognitive science and operations research, the everyday planning activity featured in this study is situated and naturalistic. This research is undertaken with a view to designing systems to support the design and decision making activity of travel planners.

We present a simple finger registration technique that can distinguish in real-time which hand and fingers of the user are touching the touchscreen. The finger registration process is activated whenever the user places a hand, in any orientation, anywhere on the touchscreen. Such a finger registration technique enables the design of intuitive multitouch interfaces that directly map different combinations of the user’s fingers to the interface operations. In this paper, we first study the effectiveness and robustness of the finger registration process. We then demonstrate the usability of our finger registration method for two new interfaces. Specifically, we describe the Palm Menu, which is an intuitive dynamic menu interface that enables user to perform mouse operations in multitouch environment. We conducted controlled experiments to compare the performance of the Palm Menu against common controlled experiments to compare the performance of the Palm Menu against common command selection interfaces and the virtual mouse interface against traditional pointing devices.
solution principles. While providing ethnographic insight and recommendations is surely ideal and appropriate in many cases, there are situations, in which a bolder engagement is called for to ensure an impact on the development process. In this paper we explore how video can function to initiate ‘requirement specs’ discussions rather than just as inspiration or field data. We investigate how video specs can support an engineering development process, and help set clear limitations for which solutions might work, and which might not, while retaining some of the richness of the field studies.

14:00  Heterogeneities and complexities in IS design - Still a need to juxtapose organizational elements and design related ideas?
Kristoffer Ræd, University in Tromsø

Designing sustainable information systems in healthcare organizations is difficult. Despite large efforts, many systems do not meet their expectations during implementation. While it is widely assumed that information systems are ‘tools’ made to improve organizational outcomes, this paper suggests that successful implementations only are obtained when technology are able to juxtapose with existing organizational structures. The aim of the paper is to contribute with insight about how mutuality between technology and organizations can be realized. Empirically, the study is based upon electronic laboratory requests in healthcare.

14:30  The Elephant in the Room - Ambiguity and Temporary Closure in a Design Process
Janni Nielsen & Mads Bødker, Copenhagen Business School

In this paper we challenge the Participatory Design practice of integrating lay perspectives and involving users in the design process. We do this by questioning the ways in which ‘asking’, ‘participation’ or ‘involvement’ is practically staged. With the aim of exploring how ideas and concepts come to be or come to be rejected, and what is the role of materials in this process we report on an experimental workshop wherein student design teams work on a case. The study shows how design ideas and concepts are managed through the phase of idea generation and conceptualization. Design decisions are really oscillations between ambiguity and temporary closures or stabilizations. They are not forking paths of decisions that lead to possibilities that lead to rhetorical situations and so on. The paper shows the potential centripetal (i.e. centering and attention grabbing) force of materials in a design workshop.

ENGAGING EXPERIENCES
B BLOCK, ROOM B122

13:30  Participatory Design at the Museum - inquiring into children’s everyday engagement in cultural heritage
Christian Dindler, Ole Sejer Iversen, Rachel Charlotte Smith & Rune Veerasawmy, Aarhus University

We address the challenge of creating intersections between children’s everyday engagement and museum exhibitions. Specifically, we propose an approach to participatory design inquiry where children’s everyday engagement is taken as the point of departure. We base our discussion on a design workshop ‘Gaming the Museum’ where a primary school class was invited to participate in exploring future exhibition spaces for a museum, based on their everyday use of computer games and online communities. We reflect on the results of the workshop, and broadly discuss the everyday engagement of children as point of departure for designing interactive museum exhibitions.

14:00  Projections on museum exhibits - engaging visitors in the museum setting
Ditte Amund Basballe & Kim Halskov, Aarhus University

Using animation, text, and visual effects as elements of projections on the Danish rune stone, Mejlbystenen (the Mejlby stone), we have explored approaches to engaging museum visitors. The installation positions itself in the field of previous installations and experiments exploring projection on physical objects, but is unique in focusing on fusing the projection and the object in an engaging approach to communicating information at a cultural heritage museum. The Mejlby stone installation is now a permanent installation at a cultural and historical museum, and, based on observation as well as interviews of museum visitors, we have analysed how the installation supports sense-making, engaging conversations, and playful engagement.

14:30  Exploring Playfulness in User Experience of Personal Mobile Products
Juha Arrasuori, Hannu Karhonen, Nokia Research & Kaisa Väänänen-Vainio-Mattila, Tampere University of Technology

User experience (UX) has been under extensive research in recent years. However, current UX models do not address in detail what the users’ experiences are when they are interacting with products. In our research, this question is explored by evaluating personal products in everyday use. In the study, 21 participants reported their experiences by writing experience reports over a period of ten days. These reports were analysed with a set of playful experience categories which enabled us to articulate - i.e., to identify and name - the core experience in each report. We found three types of experience in the reports; interaction, context and product experiences. With regards to the playfulness, the results showed that playful experience categories can largely explain the UX of personal mobile products. Our findings will help UX research and experience-driven design to focus on the most pleasurable aspects of user experiences.

DESIGNING SOCIAL EXPERIENCES
B BLOCK, ROOM B119

15:30  Designing Technology for Active Spectator Experiences at Sporting Events
Rune Veerasawmy, Aarhus University & Martin Ludvigsen, Aarhus School of Architecture

This paper explores the active spectator experience at sporting events, by presenting and reflecting upon a design experiment carried out at a number of football 1 events. The initial hypothesis of the design process, leading to the design experiment has been that the spectator...
experience is not merely an experience of receiving and consuming entertainment. It is also
heavily reliant on the active participation of the spectator in creating the atmosphere of the
entire event. The BannerBattle experiment provides interactive technology in sport arenas
with a form of interaction based on existing behaviour in the context. The work presented
also argues for a need to overcome the inclination to designing technological systems that
imitate or compete with the experience of watching the television broadcast of the game.
Experiments such as the presented BannerBattle are cornerstones in our exploratory
research-through-design approach to designing technologies for social experiences.

1600 Engagement Networks in Social Music-making
Ben Swift, Henry Gardner & Alistair Riddell, Australian National University

Social music-making systems offer the possibility of accessible and engaging group
experiences. In this paper, we explore questions concerning the notion of ‘engagement’ in
social music-making. In a recent user study of Viscotheque, an iPhone-based environment
for group musical creativity, three different types of engagement were observed: individual,
unilateral, and bilateral. These results indicate that network-based approaches may be useful
in analysing engagement relationships amongst participants in group music-making.

1630 Who makes what sound? Supporting real-time musical improvisations of
electroacoustic ensembles
Tim Merritt, Weiman Kow, Christopher Ng, Kevin McGee, & Lance Wyse, National University of
Singapore

Coordination between ensembles of improvising electroacoustic musicians is a special
case of the larger HCI problem of coordinating joint, real-time activity; one that involves
some interesting additional and different challenges. This paper reports on research that has
identified two specific real-time coordination problems for ensembles of electroacoustic
musicians: ‘who makes what sound?’ and ‘how is the sound being altered?’ Real-time sound
visualization is explored as a possible solution to assist musicians in overcoming some of
these challenges. The main contribution of this paper is that, counter-intuitively, for certain
kinds of joint, real-time, coordination activities, temporal representations are important in
helping to determine ‘who did what?’

DESIGN, BUILD, TEST

15:30 Designing Interactions for the Collective User Experience
Pat Lehane, University of Southern Queensland Toowoomba

This paper introduces the theoretical background to the interaction design used to
develop an assignment drop box at an Australian regional University and the subsequent
pilot assessment. Tenets from the Ecological School of the Discipline of Human-Computer
Interaction were used to analyse and design the human-systems integration solution to
the business process issue which was compounded by user problems with the installed
software. The analysis and design received positive user feedback in the pilot study and after
the subsequent go live became central to Learning Management System.

1600 Document Resizing for Visually Impaired Students
Michael Connolly, Christof Lutteroth & Beryl Plimmer, University of Auckland

The ability to read documents and notes is a crucial part of the education system, but for
over 1200 visually impaired students in New Zealand and many more worldwide, large and
clearly printed documents remain elusive. Resizing documents for visually impaired readers
currently requires a mixture of time, patience and experience with word processors such as
Microsoft Word. This paper describes the design and construction of an add-in to simplify
the process of resizing documents so that they become more readable to the visually
impaired. This paper discusses common problems with the resizing of documents, and the
tools produced to help reduce or eliminate these problems. The tools were evaluated in the
resizing of workbooks by staff at a visual resource centre with promising results.

1630 SketchNode: Intelligent sketching support and formal diagramming
Beryl Plimmer, University of Auckland, Helen Purchase, University of Glasgow & Hong Yul Yang,
University of Auckland

The primary motivation for building SketchNode is to provide an environment for exploring
how people use tools to create, arrange, edit and interpret graph diagrams. It has two
equivalent interfaces: sketching and diagramming, so that the functional requirements and
advantages and disadvantages of the differences can be studied. In this paper, we describe
two iterations of SketchNode, in particular the computational intelligence required to
maintain a sketch that appears hand-drawn and the complexity of providing two interfaces
that are equivalent in terms of interaction and visualization. The development and usability
tests presented here contribute to the understanding of what intelligent sketch diagramming
tools can support and the interaction paradigm of dual visualization tools.

EVALUATING INTERACTIVE TECHNOLOGIES I

15:30 Communicative Criteria for Usability Evaluation
Stefan Cronholm, Linköping University/University of B做得s

Today we are primarily using computers for communication. We communicate via computers
as professionals and at our spare time. One growing context of computer use is when we
as citizens communicating with authorities. This paper suggests communication criteria for
evaluation of public e-services. The suggested criteria are derived from a communication
perspective and applied in a case study for evaluation of an e-service. Communication
between authorities and citizens are often communication intensive and consequently
conditions and consequences of communication should be evaluated. The aim of the
suggested communication criteria is to be a complement to established traditional usability
criteria.
16:00 User Experience Evaluation Criteria for Mobile News Making Technology - Findings from a Case Study

Heli Väätäjä, Tampere University of Technology

This research explores the professionals’ user experience evaluation criteria for technology used in mobile news making. We carried out a case study in which nineteen participants used smart phones for reporting news to an online publication. We identified two sets of high-level evaluation criteria, contextual and personal. Contextual high-level criteria found are error-freeness, support for journalistic quality and speed of publishing. Personal, user-related criteria are users’ needs and goals related to enabling and supporting of professional ambition, supporting user’s professional goals, as well as fit with and enhancement of the user’s professional image. Findings provide empirical evidence on factors that affect user experience that are relevant for evaluation of mobile technology in mobile news making. In addition, findings provide an initial insight into understanding professionals’ user experience and importance of high-level goals and needs as factors linked to quality perceptions, attitudes, acceptance, affect and motivation to use mobile technologies in work context.

16:30 Event log messages as a human interface, or, “Do you pine for the days when men were men and wrote their own device drivers?”

Paul Radford, Andy Linton, Ian Welch, Victoria University of Wellington (VUW)

Computer systems administrators, as a part of their job function, must monitor event logs generated by their systems for signs of failure, impending failure, or security breaches. Many of these systems produce well-defined output that can be easily filtered for important events. Many others, however, are inordinately complex, a situation increasingly common with the advent of multi-tier systems aimed at Internet commerce. Event logs are very often the only system-level output produced by servers, and thus represent the only common denominator across vendors and solutions.

This paper will establish the position that event log messages have shortfalls as an interface for effectively managing such systems, and that a fundamentally different approach is required to improve the situation.
In the last 3 decades remote collaboration through computers has become a reality. Innovations in infrastructure, devices, and software mean we are now able to be connected more or less anywhere and at any time. We have tried to make HCI a ‘clean room’ for methodically turning out usability in our technology - but is that always useful in our everyday muddy lives? As our world changes, our design methods and models need a shake up. In this talk, I will discuss very human issues central to my own work and which I think need to take a bigger role in our thinking as we move from designing for usability to designing for usefulness: the importance of affect in decision making and action; the primacy of sociality in all our actions; the irrepressibility of our tendency to play; and the vulgar truth that we are embodied beings.

Elizabeth F. Churchill is a Principal Research Scientist at Yahoo! Research in Santa Clara, CA where she manages the Internet Experiences research group. Elizabeth has an undergraduate degree in Experimental Psychology and an MSc in Knowledge Based Systems, both from the University of Sussex in the UK, and a PhD from the University of Cambridge in Cognitive Science. She has published on many topics including implicit learning, human-agent systems, mixed initiative dialogue systems and social aspects of information seeking. Her current work covers areas such as mediated communication and collaboration, social media, mobile connectivity, transmedia technologies, digital archive and memory, and the development of emplaced media spaces.

Until September of 2006, she worked at the Palo Alto Research Center (PARC), California, in the Computing Science Lab (CSL). Prior to that she led the Social Computing Group at FX Palo Laboratory, Fuji Xerox’s research lab in Palo Alto. Elizabeth writes a column for ACM interactions, is a Distinguished Member of the ACM and is the current VP of ACM SigCHI (Human Computer Interaction SIG).

10:15 Demonstrations

AGEING AND OLDER PEOPLE

11:15 Social isolation of older people: the role of domestic technologies
Sonja Pedell, Frank Vetere, Lars Kulik, Elizabeth Ozanne, The University of Melbourne & Alan Gruner, Benetas

This paper explores the role of domestic technologies for addressing social isolation of older people. Despite the increasing use of information and communication technologies, social isolation remains an issue amongst older people. Assistive technologies address important health needs, but there is a lack of social technologies that adequately deal with social isolation. This paper contributes to knowledge about the everyday life of older people for the purpose of designing appropriate social technology. We present an overview of the findings of a three-stage study—an expert survey, a field study and a design workshop—and describe a set of needs to inform the design of technology for ameliorating the social isolation of older people.

11:30 Silver Towns and Smart Technologies
Sung Jun Kim & Bharat Dave, The University of Melbourne

The rapidly increasing aging population combined with a lack of aged care facilities in Korea has led to the recent development of silver towns. They comprise high-rise apartment units that are conceived, designed and marketed as smart living environments for the elderly. This paper offers a preliminary analysis from our research on how silver towns integrated with smart technologies are received from the perspectives of elderly residents.

11:45 Older adults, interface experience and cognitive decline
Alethea Blackler, Douglas Mahar & Vesna Popovic, Queensland University of Technology

This paper describes an experiment undertaken to investigate intuitive interaction, particularly in older adults. Previous work has shown that intuitive interaction relies on past experience, and has also suggested that older people demonstrate less intuitive uses and slower times when completing set tasks with various devices. Similarly, this experiment showed that past experience with relevant products allowed people to use the interfaces of two different microwaves more quickly and intuitively. It also revealed that certain aspects of cognitive decline related to aging, such as central executive function, have more impact on time, correct uses and intuitive uses than chronological age. Implications of these results are discussed.

12:00 The lived world of older urban Australians: Relating everyday living to GPS tracking data.
Desley Vine & Laurie Buys, Queensland University of Technology

Neighbourhood like the concept of liveability is usually measured by either subjective indicators using surveys of residents’ perceptions or by objective means using secondary data or relative weights for objective indicators of the urban environment. Rarely, have
objective and subjective indicators been related to one another in order to understand what constitutes a liveable urban neighborhood both spatially and behaviourally. This paper explores the use of qualitative (diaries, in-depth interviews) and quantitative (Global Positioning Systems, Geographical Information Systems mapping) liveability research data to examine the perceptions and behaviour of 12 older residents living in six high density urban areas of Brisbane. Older urban Australians are one of the two principal groups highly attracted to high density urban living. The strength of the relationship between the qualitative and quantitative measures was examined. Results of the research indicate a weak relationship between subjective and objective indicators. Linking the two methods (quantitative and qualitative) is important in obtaining a greater understanding of human behaviour and the lived world of older urban Australians and in providing a wider picture of the urban neighborhood.

12:15 The effects of cognitive ageing on use of complex interfaces
Raghavendra Reddy Gudur, Alethea Blackler, Doug Mahar & Vesna Popovic, Queensland University of Technology

This paper discusses an experiment investigating the effects of cognitive ageing and prior-experience with technology on using complex interfaces intuitively. Overall 37 participants, between the ages of 18 to 83, participated in this study. All participants were assessed for their cognitive abilities and prior-experience with technology. It was anticipated that the Central Executive function (a component of Working Memory) would emerge as one of the important cognitive functions in using complex interfaces. This was found to be the case with the strongest negative correlation occurring between sustained attention (one of the functions of the Central Executive), the time to complete the task and number of errors made by the participants.

12:30 Communities of everyday practice and situated elderliness as an approach to co-design for senior interaction [Invited Paper]
Eva Brandt, Thomas Binder The Danish Design School, Denmark & Lone Malmberg, The IT University of Copenhagen, Denmark

In the co-design project “Senior Interaction”, a public care unit, university researchers, industrial partners, and senior citizens are working together to design living labs applying digital concepts that can strengthen social networks and interaction among seniors. Users are never just ‘out there’. When approaching people who we envisioned to be the future users we realized that almost nobody among the people between 55 and 75 years old identified themselves as ‘elderly’ or ‘senior citizens’. Instead they tend to refer to ‘the others’ or even to their own parents. Rather than using biological age, institutional categories or similar formal ways to group the people that we imagine as the future users, we suggest to talk about situated elderliness. By associating elderliness not to all encompassing life circumstances but to certain everyday contexts we can turn our attention towards what we call communities of everyday practice that define these contexts.
rarely discussed. This paper critically reflects on a project to shed some light on the ‘secret life of artifacts’ and the role they play through making and using by the project team.

12:00 Visualizing Digital Media Interactions: Providing feedback on jam2jam AV performances
Andrew Brown, Queensland University of Technology

Instrumental music performance is a well-established case of real-time interaction with technology and, when extended to ensembles, of interaction with others. However, these interactions are fleeting and the opportunities to reflect on action is limited, even though audio and video recording has recently provided important opportunities in this regard. In this paper we report on research to further extend these reflective opportunities through the capture and visualization of gestural data collected during collaborative virtual performances; specifically using the digital media instrument Jam2jam AV and the specifically-developed visualization software Jam2jam AV Visualize. We discuss how such visualization may assist performance development and understanding. The discussion engages with issues of representation, authenticity of virtual experiences, intersubjectivity and wordless collaboration, and creativity support. Two usage scenarios are described showing that collaborative intent is evident in the data visualizations more clearly than in audio-visual recordings alone, indicating that the visualization of performance gestures can be an efficient way of identifying deliberate and co-operative performance behaviours.

12:15 Research In and Through Design - An Interaction Design Research Approach
Peter Dalsgaard, Aarhus University

This paper presents and discusses an approach to interaction design research entitled research in and through design. This denotes the study of the design process through the active involvement of the researcher in experimental design activities. The approach is exemplified by a case in which interaction design researchers engaged in the development of an interactive façade in order to generate insights into how to plan and carry out design for this type of interactive systems. This is followed by a discussion of the criteria by which the process and outcomes of research in and through design can be evaluated.

12:30 Using Diaries for Evaluating Interactive Products: The Relevance of Form and Context
Martin Tomitsch, Nikash Singh & Ghazaleh Javadian, The University of Sydney

In this paper we discuss two studies, in which we used incident diaries to evaluate different aspects of a web-based tool and a wearable display. For the web-based tool we used a diary in form of a table distributed in digital form, which resulted in a very low number of responses. Results from follow-up interviews revealed that one of the reasons for this low response rate was a mismatch between diary form and study context. For the wearable display we designed booklets, which featured predefined sections and questions as well as space for open comments. Although previous research has identified disadvantages of paper-based diaries, this method proved to be valuable for collecting feedback in a mobile context. Based on our experiences and the results from the studies, we provide a qualitative discussion of design issues for diaries used in mobile and desktop-based contexts.

INDUSTRY CASE STUDIES

11:15 Making Numbers Count: Tangible UCD
Tamsin Stanford & Florian Nachreiner, ANZ

In April 2009, ANZ’s Productivity Forum funded a project to improve the productivity and user experience of a section of ANZ’s intranet, Max.

The three components of the project are: 1. A new Information Architecture for the Frontline Australia section, used by customer-facing staff in branches and call centres. 2. Best practice principles applied to content. 3. Evaluating the efficiency and effectiveness of centralising publishing resources.

The main objectives are to: reduce time costs incurred by searching and asking other staff when information is hard to find and publishing pages/documents that are not required; increase accuracy and reliability of content and identify appropriate publishing model.

A user-centred approach involved a high number of users at all phases through interviews, contextual enquiries, online card sorting and benchmark tests.

11:45 Enterprise Experience Architecture – root and branch design of online services
Faruk Avdi, New South Wales Department of Education and Training

The case study will recount how Australia’s largest organisation transformed its web publishing and personalisation services over the period 2005 – 2010, utilising user centred design. The session looks at the conception-through-implementation of new online communication services for customers and staff of the NSW Department of Training and Education.

12:15 Using participatory design with internal stakeholders to drive product innovation
Larissa Azevedo, Westpac

This presentation will share our experience in using participatory design to ramp up our domain knowledge, to leverage internal IP, and to gain buy-in and support from senior stakeholders.

In this case study, the customer experience team was engaged in the early phase of the project to help uncover customer and business opportunities in order to innovate and differentiate the payment space. After some looking-in and looking-out activities, the team engaged internal stakeholders – the business owner, subject-matter experts, and relationship managers – into a series of participatory design workshops.

This session will be useful to CHISIG peers who are interested in the ongoing conversation between academia and industry, and how we can interweave our experience to move the user-experience practice to a more mature and broadly adopted stage.
14:15 Reflecting on Reflection: Framing a Design Landscape
Rowanne Fleck, University of Sussex & Geraldine Fitzpatrick, Vienna University of Technology/University of Sussex

Designing for reflection is becoming of increasing interest to HCI researchers, especially as digital technologies move to supporting broader professional and quality of life issues. However, the term ‘reflection’ is being used and designed for in diverse ways and often with little reference to vast amount of literature on the topic outside of HCI. Here we synthesize this literature into a framework, consisting of aspects such as purposes of reflection, conditions for reflection and levels of reflection (where the levels capture the behaviours and activities associated with reflection). We then show how technologies can support these different aspects and conclude with open questions that can guide a more systematic approach to how we understand and design for support of reflection.

14:45 Curbing Paper Wastage Using Flavoured Feedback
Richard Medland, National ICT Australia (NICTA) & Queensland University of Technology - Institute for Creative Industries and Innovation

In November 2009 the researcher embarked on a project aimed at reducing the amount of paper used by Queensland University of Technology (QUT) staff in their daily workplace activities. The key goal was to communicate to staff that excessive printing has a tangible and negative effect on their workplace and local environment. The research objective was to better understand what motivates staff towards more ecologically sustainable printing practices, whilst meeting their job’s demands. The current study is built on previous research that found that one interface does not address the needs of all users when creating persuasive Human computer Interaction (HCI) interventions targeting resource consumption. In response, the current study created and trialled software that communicates individual paper consumption in precise metrics. Based on preliminary research data different metric sets have been defined to address the different motivations and beliefs of user archetypes using descriptive and injunctive normative information.

15:00 Householder Experiences with Resource Monitoring Technology in Sustainable Homes
Wendy Miller & Laurie Buys, Queensland University of Technology

The use of feedback technologies, in the form of products such as Smart Meters, is increasingly seen as the means by which ‘consumers’ can be made aware of their patterns of resource consumption, and to then use this enhanced awareness to change their behaviour to reduce the environmental impacts of their consumption. These technologies tend to be single-resource focused (e.g. on electricity consumption only) and their functionality defined by persons other than end-users (e.g. electricity utilities). This paper presents initial findings of end-users’ experiences with a multi-resource feedback technology, within the context of sustainable housing. It proposes that an understanding of user context, supply chain management and market diffusion issues are important design considerations that contribute to technology ‘success’.

Freya Palmer & Eamonn O'Neill, University of Bath

The ubiquitous and highly personal nature of mobile devices, together with the partially embodied nature of Bluetooth, means that mobile device-based Bluetooth provides unique affordances for communicating aspects of identity. We report a study of how people interpret Bluetooth names in terms of social identity, considering it as an example of mobile technology-mediated identity. We used card-sorting, hierarchical cluster analysis, multi-dimensional scaling and qualitative analysis to establish perceived types of Bluetooth name and dimensions of naming; illustrating how people conceptualise and interpret technology-mediated identity projected by others.

14:15 What’s My Name Again? Sociotechnical Considerations for Author Name Management in Research Databases

Dana McKay, Rebecca Parker, Library, Institute for Social Research/Swinburne University of Technology & Silvia Sanchez, The Hiser Group.

Managing names in bibliographic databases so that they have a one-to-one match with individual authors is a longstanding and complex problem. Various solutions have been proposed, from labour-intensive but accurate manual matching, to machine-learning approaches to automated matching which require little input from people, but are not perfectly accurate. Researchers have a particular interest in name management: they are often authors, and receive academic credit based on their work and need correct citation records. However they are also searchers and have an interest in finding all the works by other authors. There has been little work on the tensions between these two needs, nor on how researchers manage their own identities with their choices of name. This paper reports on a study of researchers that investigates both their relationships with their own names, and what they would like from research databases when they are searching for specific authors.

14:45 Reinforcing bad behaviour: the misuse of security indicators on popular websites

Douglas Stebila, Queensland University of Technology

Before making a security or privacy decision, Internet users should evaluate several security indicators in their browser, such as the use of HTTPS (indicated via the lock icon), the domain name of the site, and information from extended validation certificates. However, studies have shown that human subjects infrequently employ these indicators, relying on other indicators that can be spoofed and convey no cryptographic assurances. We identify four simple security indicators that accurately represent security properties of the connection and then examine 125 popular websites to determine if the sites’ designs result in correctly displayed security indicators during login. In the vast majority of cases, at least some security indicators are absent or suboptimal. This suggests users are becoming habituated to ignoring recommended security indicators.

15:00 How HCI Design Influences Web Security Decisions

Kenneth Radke, Colin Boyd, Margot Brereton, & Juan Gonzalez Nieto, Queensland University of Technology

Even though security protocols are designed to make computer communication secure, it is widely known that there is potential for security breakdowns at the human–machine interface. This paper reports on a diary study conducted in order to investigate what people identify as security decisions that they make while using the web. The study aimed to uncover how security is perceived in the individual’s context of use. From this data, themes were drawn, with a focus on addressing security goals such as confidentiality and authentication. This study is the first study investigating users’ web usage focusing on their self-documented perceptions of security and the security choices they made in their own environment.

QUT Faculty of Science and Technology proudly sponsors OZCHI.

Science and technology are the engines of growth and wellbeing in modern society. QUT’s Faculty of Science and Technology combines teaching excellence and ground-breaking research with strong industry links and a global perspective to give you the opportunity to help us change the world. The Faculty has world-leading collaborations with major corporations and universities across the globe. These links underpin our excellence in research and teaching.

Faculty of Science & Technology
Web www.scitech.qut.edu.au
While working as head of a user-centred design group with a large Danish manufacturer, a director once challenged me to think of “What’s the next career move for your interaction designers?” I was at a loss of words, because besides offering them my management chair, what else would there be? Some may be content to specialise in user interfaces and web interaction - challenges enough for a lifetime there - but what options are there for the ones who like to expand their responsibility?

I’d like to discuss how the broader field of user innovation can benefit from interaction design. Many industries bank on market-led or even user-driven innovation these days. They crave for innovation that takes people and use rather than new technologies as a starting point for new products and services. But even if ‘design’ and ‘innovation’ sound like much the same thing, I encountered two major challenges in trying to move a research group from ‘design’ to ‘innovation’: One was to relate to the business of what we were inventing, the other to see innovation actually come through the everyday politics in an organisation. Surprisingly, the core competencies of interaction designers and HCI specialists can carry far beyond what we were trained for:

We understand interaction. Mind you, most of us have specialised in interaction between people and technology, but the fundamental understanding of interaction can help us think of, for instance, business as interaction. I will show examples of how interaction designers use this competence to ‘build’ interactive value networks and tangible business models.

We understand collaboration. We have learned to facilitate collaboration between developers and users, but many of the methods we employ can support cross-disciplinary collaboration much more broadly between business partners and within industrial organisations. I will suggest how interaction designers can use this competence to support the ‘social shaping of innovation’ that inevitably must happen if an organisation moves beyond a technology push paradigm.

All in all I believe interaction designers are well equipped to play a role and influence the innovation agendas in private and public organisations.

Jacob Buur is professor of User-Centred Design at the Mads Clausen Institute for Product Innovation, University of Southern Denmark, and research director of the strategic research centre SPIRE. With 25 employees, SPIRE aims to establish the theoretical foundation for ‘Participatory Innovation’ - a new approach to user-driven innovation that expands the notion of user and includes business modeling in the user collaboration. SPIRE is cross-disciplinary, uniting researchers from design-antropology, interaction design, interaction analysis, business, innovation management and SPIRE collaborates with the theatre company Dacapo and Danish and international industries.

Prior to Jacob’s appointment at the university he was manager of the user-centred design group at Danfoss AVS for 10 years. Here he designed user interfaces for a range of professional products, including joysticks for excavators, electronic controllers for heating and refrigeration, valves and frequency converters. Jacob develops methods for studying and involving users in design, and in particular he has pioneered video techniques for bridging user studies and innovation. Jacob graduated with a MSc in Electrical Engineering and a PhD on mechatronics design.
McCarthy and Wright’s (2004) approach to understanding user experience provides a rich conceptual framework. In this paper, we report how this framework was used to guide the development of an approach to researching the richness of a particular experience - serendipity. Three themes were identified: life as lived and felt, the whole person, and dialogical sense making. These were used to help understand the key qualities of the strategy, tools and techniques that were required in the empirical study of the experience of serendipity. The paper explains this process and illustrates the depth of understanding that our choice of tools afforded. After describing the case study we offer some guidance on how to choose appropriate tools and methods for researching other types of experience.

10:00 A Methodology to Evaluate Creative Design Methods: A Study with the BadIdeas Method

Paula Alexandra Silva, Fraunhofer Portugal & Janet C. Read, University of Central Lancashire

The so-called creative design methods have become part of the everyday HCI-ers toolbox, however there is little discussion in the field concerning the actual value and the relative benefit of applying one method instead of another or of applying various methods in one’s design efforts. These methods and techniques tend often to be applied in an unthoughtful uninformed manner. This paper discusses the issue of evaluating and comparing the design methods and presents an overview of creativity measures for idea generation together with an attempt to rationalise those measures and combine them into a single value metric. This measure is then applied to assess the results obtained while using a specific method, the BadIdeas method, under various conditions; some observations and analysis on the possible effects of those conditions are performed. Findings are surprising. Facilitated conditions positively affect participants’ enjoyment of the method and the way they think about analysing products but the overall value of facilitation appears less than the overall value of unfacilitated work. The method seems to work better for groups that initially work individually, than those who start working in groups and overall results are better in a design, rather than in a redesign context.

10:30 AUXie: Initial Evaluation of a Blind-Accessible Virtual Museum Tour

Aram Dulyan & Ernest Edmonds, University of Technology Sydney/Creativity and Cognition Studios

Remotely accessible audio-based virtual tours can offer great utility for blind or vision impaired persons, eliminating the difficulties posed by travel to unfamiliar locations, and allowing truly independent exploration. This paper draws upon sonification techniques used in previous implementations of audio-based 3D environments to develop a prototype of blind-accessible virtual tours specifically tailored to the needs of cultural sites. A navigable 3D world is presented using spatially positioned musical earcons, accompanied by synthesised speech descriptions and navigation aids. The worlds are read from X3D models enhanced with metadata to identify and describe the rooms and exhibits, thus enabling an audio modality for existing 3D worlds and simplifying the tour creation process. The prototype, named AUXie, was evaluated by 11 volunteers with total blindness to establish a proof of concept and identify the problematic aspects of the interface. The positive response obtained confirmed the validity of the approach and yielded valuable insight into how such tours can be further improved.

10:45 Personality, Motivation and Video Games

Daniel Johnson, Queensland University of Technology & John Gardner, CSIRO

This study explored relationships between personality, video game preference and gaming experiences. Two hundred and thirty-five participants completed an online survey in which they recalled a recent gaming experience, and provided measures of personality and their gaming experience via the Player Experience of Need Satisfaction (PENS) measure. Relationships between game genre, personality and gaming experience were found. Results are interpreted with reference to the validity of the PENS, current models of video gaming motivations and enjoyment, and sub-groups of people that may be more vulnerable to possible negative effects of games.

EVALUATING INTERACTIVE TECHNOLOGIES 2 ROOM B121

9:30 Improving Stylus Interaction for eMedical Forms

Nilanthi Seneviratne & Beryl Plimmer, University of Auckland

Using a stylus as the input device to fill forms- is frustrating because standard form controls are optimised for keyboard and mouse entry. We have augmented the behaviour of the three most common form controls to improve support for stylus input. Furthermore, because the target users are medical clinicians and they frequently annotate images, we have built an image annotation control. We report the design and implementation of stylus-friendly controls and two evaluations; the first to usability test all the new controls and the second to compare performance between the new selection controls and standard selection controls. All the new data controls were preferred by the study participants and the selection controls are faster and less error prone. The image annotation control was found to be easy to use and allows extra data to be collected.
Tag clouds are visualisations of data where words (or tags) are positioned in a cloud and augmented with visual properties, such as font size and colour, to depict data attributes. Although tag clouds are common on web sites and blogs, their effectiveness as a visualisation technique has received little research attention. We conducted two experiments to provide empirical insights into the relative effectiveness of tag clouds compared with traditional tables. Tables were selected as the most basic visualisation performance baseline. The first experiment concerned the speed and accuracy with which participants could identify the presence or absence of a specified target in an unsorted tag cloud or table. The second experiment also analysed speed and accuracy with tag clouds and tables, but in tasks concerning identification of maximum and minimum attribute values. Tables were faster and more accurate in both tasks. We discuss implications for further work.

The focus of digital tabletop research centers on the interactive display area. However, these displays are often integrated into physical non-interactive structures, which have received little attention previously. In this paper, we investigate the characteristics of this non-interactive area, or ‘rim’ around the interactive display. We aim to increase the awareness and understanding of possible characteristics of non-interactive rims in order to guide designers to enhance user interaction and collaboration on the tabletop as a whole. Our findings were drawn from rim configurations in existing experimental settings, commercially available systems, and observations from a preliminary exploratory study that captures the usage of the rim by small groups collaborating in an office environment. We also envision possible opportunities that may arise for future tabletop systems.

Head motion and eye gaze are general models of natural human interaction. Recent computer vision based head tracking and eye tracking technologies have expanded the possibilities of designing and developing more natural and intuitive user interfaces for a wide range of applications. In this work, we focus on common hands-busy situations in teleoperation activities, where operators often have to control multiple devices simultaneously by hand in order to accomplish operational tasks. This overloads an operator’s hand control ability and also reduces productivity. We present an empirical user study comparing head motion and eye gaze as different input modalities for remote camera control when a user is carrying out a hands-busy task. Both objective measures and subjective measures were used for the study. According to the results, we demonstrate the advantages of using gaze for remote camera control in such hands-busy settings.
Informal interactions underpin basic social processes. Mobile, email and web-based communications increasingly play a role in informal interactions, but these technologies often lack the facilitating conditions typically found in face-to-face (F2F) settings. In this paper we investigate informal interactions by exploring how students ‘get together’ when out-of-class. We establish if and when copresence is felt in physical and technological settings and what kinds of informal interactions arise as a result. The findings reveal that copresence in technological settings is associated with temporality and ‘feeling connected’ through synchronous and semi-synchronous mediums. This feeling includes being aware of others’ availability for interaction or knowing their whereabouts. Different settings also have different implications for copresence and informal interactions.

**LEARNING AND SEARCHING**

**11:30** Can Traditional HCI Principles Be Applied to Computing Technology in Learning Contexts?

*Daryl Ku, Jon Pearce & Wally Smith, Interaction Design Group, University of Melbourne*

This paper presents an inter-disciplinary approach to studying computing technology in learning contexts. The approach was inspired by the difficulty in reconciling task and learning performance in the context of usability and instructional design. This is important because inter-governmental policy suggests computing technology may have a crucial role to play in supporting independent lifelong learning in informal contexts. The approach presented here is illustrated through an exploratory research project aimed at understanding the role of computing technology in the context of the Australian PhD candidacy.

**11:45** Child-Robot Interaction during Collaborative Game Play: Effects of Age and Gender on Emotion and Experience

*Suleman Shahid, Ermel Krahmer, Marc Swerts, Tilburg center for Cognition and Communication (TICC), Tilburg University & Omar Mubin, Eindhoven University of Technology*

In this paper we investigate how boys and girls of 8 and 12 years old experience interacting with a social robot (iCat) during collaborative game play. The iCat robot and a child collaborated together to play a simple card guessing game. Post-game questionnaires revealed that 8 year old children rated their subjective gaming experience significantly more positively than the 12 year olds. All interactions were recorded, and fragments were shown to judges in a perception experiment, which showed that 8 year olds were more expressive than 12 year olds, and that 12 year old losers were more expressive than 12 year old winners. The implications of these findings for designing child-robot interaction are discussed.

**12:00** Spelling Bug - Benefits of using adaptive technology for training spelling in primary school classrooms

*Marie Boden, Stephen Viller & Shelley Dole, The University of Queensland*

We have developed, used and evaluated Spelling Bug, a computer program designed for teachers and students in primary school classrooms, in three schools in Brisbane over 1.5 years. We evaluated how learner-adaptive computer programs can be successfully integrated in primary classrooms in situ, using observations, interviews and computer-based data logs. The study found participating teachers felt time poor and they did not prioritise learning to use new technologies. However, if they find add-on value they use the technology to complement traditional teaching. The response to using Spelling Bug was positive from both teachers and students. Students enjoyed a new task for working with spelling and they responded positively to the individual challenge the computer program set up for them. Teachers were pleased to find their students working independently and found time to support individual needs in the classroom. Retrieving information from a computer program gave support for teachers when making decisions on how to proceed with their teaching and presenting to parents.

**12:15** Web Searching Interaction Model based on User Cognitive Styles

*Khamsum Kinley, Dian Tjondronegoro & Helen Partridge, Queensland University of Technology*

As more and more information is available on the Web finding quality and reliable information is becoming harder. To help solve this problem, Web search models need to incorporate users’ cognitive styles. This paper reports the preliminary results from a user study exploring the relationships between Web users’ searching behavior and their cognitive style. The data was collected using a questionnaire, Web search logs and think-aloud strategy. The preliminary findings reveal a number of cognitive factors, such as information searching processes, results evaluations and cognitive style, having an influence on users’ Web searching behavior. Among these factors, the cognitive style of the user was observed to have a greater impact. Based on the key findings, a conceptual model of Web searching and cognitive styles is presented.

**12:30** User-Web Interactions: How Wholistic/Analytic Web Users Search the Web?

*Khamsum Kinley, & Dian Tjondronegoro, Queensland University of Technology*

User-Web interactions have emerged as an important research in the field of information science. In this study, we examine extensively the Web searching performed by general users. Our goal is to investigate the effects of users’ cognitive styles on their Web search behavior in relation to two broad components: Information Searching and Information Processing Approaches. We use questionnaires, a measure of cognitive style, Web session logs and think-aloud as the data collection instruments. Our study findings show wholistic Web users tend to adopt a top-down approach to Web searching, whereas the users searched for a generic topic, and then reformulate their queries to search for specific information. They tend to prefer reading to process information. Analytic users tend to prefer a bottom-up approach to information searching and they process information by scanning search result pages.
Many user studies in Web information searching have found the significant effect of task types on search strategies. However, little attention was given to Web image searching strategies, especially the query reformulation activity despite that this is a crucial part in Web image searching. In this study, we investigate the effects of topic domains and task types in users' image searching behavior and query reformulation strategies. Some significant differences in users' tasks specificity and initial concepts were identified among the task domains. Task types are also found to influence participant's result reviewing behavior and query reformulation strategies.

Effect of Topic Domain and Task Type on Web Image Searching

Jack Tseng & Dian Tjondronegoro, Queensland University of Technology

The Social Web is a torrent of real-time information and an emerging discipline is now focussed on harnessing this information flow for analysis of themes, opinions and sentiment. This short paper reports on early work on designing better user interfaces for end users in manipulating the outcomes from these analysis engines.

User Interface Design for Social Web Theme and Opinion Analysis

Renato Iannella, Semantic Identity, Queensland University of Technology, Adam Finden, Stackd Creations & Laurianne Sitbon, Queensland University of Technology

Participating in face-to-face events can be intense experiences in which people invest part of themselves. The socially intense experience is often a catalyst for new thoughts and extended by participation in social media on the web. The extension provides the possibility of overcoming some of the limitations of a face-to-face encounter, e.g., limitations in time and location data on a number of participating mobile phones. Past routes are visualised as routes of other group members within a defined area. ReGroup collects and shares GPS location data on a number of participating mobile phones. Past routes are visualised as coloured lines on a map of the surrounding area. An initial evaluation of the system at a busy location suggests that there is a great deal of potential usefulness in sharing previous location data on a number of participating mobile phones. Past routes are visualised as coloured lines on a map of the surrounding area.

Extending design encounters with use of social media

Signe L.Yndigegn, IT University of Copenhagen

The landscape for discovering and sharing music is changing due to the rise of social media and mobile devices with increasing amounts of features. This paper looks at the omnipresence of music and the social perspective of online music services among the youth, and describes a survey-based case study of 44 Finnish. The findings reveal that social media facilitates important aspects that engage the users, such as recommendations, large selections, and free content, but also that traditional media, e.g., FM radio has still a strong role in the omnipresence use of music.

Social Music Services in Teenage Life - A Case Study

Sari Komulainen, Minna Karukka & Janna Hääkkilä, Nokia Oyj, Nokia Research Center

Tag clouds are becoming increasingly popular visualisation and interaction techniques used on the web today. At the same time, tag clouds have been shown to have somewhat limited capabilities and usefulness. The generation of personalised tag clouds provides the ability to test how the enjoyment and engagement of an online social environment can be increased, as well as the ability to examine what benefits adding additional social information to tag clouds would have. A prototype system was developed that allowed differently configured tag clouds to be compared side-by-side. This research contributes an understanding into the feasibility of increasing the social awareness provided by tag clouds, and shows that there is potential for improving the usefulness of tag clouds by including additional social awareness information in these clouds.

Tag Clouds as Social Signallers

Timothy Christie, Christopher Lueg, University of Tasmania & Nilufar Baghaei, Tasmanian ICT Centre, CSIRO

The increasing ubiquity and proliferation of location-based data comes with a need to make sense of it. Geovisualisation provides a tool with which, through the exploitation of our powerful perceptual abilities, we can uncover patterns and links between previously disparate data sources. However, in the context of sense and decision making, presenting information through the frame of location is not enough – a holistic system, that incorporates geovisualisation, needs to be aware of the broader context in which it exists. A point represented by GPS coordinates can have different meanings to different people, and even an individuals' interpretation of a location can change over time. This paper will discuss the role of geovisualisation in knowledge discovery, with location as a context to this process.

Geovisualisation: Sense-making and knowledge discovery with location-based data

Chris Marmo, William Cartwright & Jeremy Yuille, RMIT University

Many shared group activities, such as determining the range of different foods offered at a market, require that group members know which parts of the market will be covered by which people. In this paper we report findings from evaluating ReGroup, a mobile distributed information system that enables group members to “see” the current and immediate past routes of other group members within a defined area. ReGroup collects and shares GPS location data on a number of participating mobile phones. Past routes are visualised as coloured lines on a map of the surrounding area. An initial evaluation of the system at a busy marketplace suggests that there is a great deal of potential usefulness in sharing previous locations amongst members of a group.

ReGroup: Using Location Sharing to Support Distributed Information Gathering

Tim Nugent & Christopher Lueg, University of Tasmania
Agile ridesharing aims to utilise the capability of social networks and mobile phones to facilitate people to share vehicles and travel in real time. However, the application of social networking technologies in local communities to address issues of personal transport faces significant design challenges. In this paper we describe an iterative design-based approach to exploring this problem and discuss findings from the use of an early prototype. The findings focus upon interaction, privacy and profiling. Our early results suggest that explicitly entering information such as ride data and personal profile data into formal fields for explicit computation of matches, as is done in many systems, may not be the best strategy. It might be preferable to consider the potential for the functionality of a personal safety device to be embodied within apps that do everything from acting as a carpenter’s level to a pregnancy predictor, we however, that at a time when the average iPhone staggers under the weight of a plethora of apps that do everything from acting as a carpenter’s level to a pregnancy predictor, we consider the potential for the functionality of a personal safety device to be embodied within a stand alone artifact.

In this paper, I propose to address eParticipation as an Information Ecology (Nardi & O’Day, 1999). By examining the micro-scale level of two cases of eParticipation as Information Ecologies, I identify micro-level technological building blocks and the artful integrations performed by actors whose role is often not enough emphasized. HCI research in the area of eParticipation should acknowledge the role of these actors in order to design eParticipation with and for them.

Our research considers the problem of designing support for local community communications. We present a description of a suburban community communication fabric as revealed through observations of long-term use of a networked community noticeboard and the introduction of a tailored email digest to registered noticeboard users. The paper contributes an understanding of how iterative situated design in a user community can help us to design for participation in the use of technologies that can support growth of a community communication fabric. The different roles of the situated display and email digest are discussed.

In collaboration interaction design projects involving researchers and external stakeholders, there is an inherent risk that conflicting agendas may lead to outcomes that are not mutually beneficial. This paper examines how the interests of researchers and external stakeholders may be aligned around joint experiments that are at the intersection between researchers’ agendas of exploring research questions and external stakeholders’ pursuit of specific strategies or contractual commitments. The contribution of the paper is an extension of the notions of question, program and experiment as proposed by Brandt & Binder (2007) to include the external stakeholder perspective; furthermore, the paper explores how series of experiments can be combined in long-term research projects.

In this paper we discuss new challenges to design with the increasing mass availability of data to various communities through what we term ‘collective sensor networks’. We review new projects that we believe will have considerable impact for HCI and CSCW and consider their practical implications. We explore design challenges for future-oriented and sustainable communities that are built around sharing and integrating data from various sources. We are interested especially in how these projects involve and envision interaction between different actors and across different scales. We also wish, through drawing on notions of fiction in literature, to explore the practical possibilities of connecting new kinds of data through a network for the creation of new communities and a series of implications for interaction and interface design that deal with these heterogeneous actors and various scales.
KEYNOTE: Toni Robertson | Power to the people! Human centred design as a basic human right.

B BLOCK, ROOM B117

Those of us who work in HCI often mutter among ourselves about the need to find ways to harness new technologies for maximum human benefit, sometimes even claiming that this is a major motivation for working in the field at all. We investigate issues round the use of new and emerging technologies especially appropriate interaction styles and design/evaluation methods and processes. We have learned a great deal about designing usable, useful, robust and effective interactive technologies that can enable enjoyable and positive experiences for those who use them. So it is a bit of a shock when we go into a workplace to discover that nothing much we have learned seems to have got through to those who made decisions about the technology being used there. Too many people still use really badly designed technologies when there is no good reason for them to do so. These technologies just seem to exist as they are - unchallenged - not as things that have been designed that can be better or worse depending on how that design has been done and managed. Motivated by a field study of just such a workplace, this keynote is intended to seed some wondering about how we can widen community expectations, even demand, for technologies well suited to the situations in which they are used. Who else but us will take up this challenge?

Associate Professor Toni Robertson directs the Interaction Design and Human Practice Lab (IDHuP) at the University of Technology Sydney and co-directs the UTS Human Centred Technology Design Research Strength. Her research is directed to understanding the interactions between people, their activities and technology and the issues surrounding the use of technology in actual work and social settings. She specialises in the application of qualitative and participatory research and design methods and the use of phenomenological perspectives to understand actual human experience of technology use.

She is recognised particularly for her seminal work identifying and applying the relevance of phenomenology to the analysis of human activity in relation to technology design practices. Her approach provides a principled and generative grounding for designing and evaluating technologies that privilege the experience of those who use the technology and advance human agency in all aspects of technology design and use. She is also among those researchers and practitioners who have always conceptualised HCI as a design discipline.

3:45 Conference Close
**SmartGardenWatering: modelling and sharing your gardens online**

**Jon Pearce, Interaction Design Group, The University of Melbourne & John Murphy, Design4Use**

smartgardenWatering.org.au is an interactive online application that provides an irrigation schedule for your garden for each month of the year. The program takes into account factors such as climate zones, soils, mulches, slope of the ground and microclimate (sun and wind conditions). You can select plants from the comprehensive Burnley Plant Directory of 1500 plants. A water tank simulation allows you to evaluate the performance of various tank sizes.

An exciting feature of the new version of SGW is the ability to save your garden models online, and then invite others to explore and discuss them through Facebook. Alternatively, you can use a Google Maps interface to find gardens in your local area that others have modelled and search them, sort them, rate them and share them. Our current research is exploring this use of social networking to support behaviour change.

**Augmented Ethnography: Designing a Sensor-Based Toolkit for Ethnographers**

**Elizabeth F. Churchill, Ozzie Gooen, David A. Shamma Internet Experiences Group, Yahoo! Research USA**

We demonstrate a sensor toolkit designed to help ethnographers better understand people's everyday activities. Techniques, such as diary studies, where participants capture their activities for a period of time are routinely used in technology design and evaluation at companies like Yahoo!. Less frequently used is shadowing where ethnographers accompany or follow people as they go about their tasks. However, with the increasing penetration of mobile personal devices like cell phones and GPS-enabled, digital tablets, it is becoming more important for us to understand how technologies fit into people lives as they go about their daily business. Tools for ethnographers have changed dramatically over the decades with smaller, cheaper, and easier to use technologies allowing capture of audio, image and film data to capture people's activities for later analysis. In this demonstration, we explore how sensor-based technologies can extend this toolkit further.

"Please touch the plant on your way up the stairs..."

**Susan Loh & Yasuhiro Santo, Queensland University of Technology**

We are aware of global concerns of sustainability and are encouraged on many fronts to modify our behaviour to save the planet but sometimes this understanding is more intellectual than motivated.

An opportunity was identified within the university environment to activate a pilot study to investigate the level of voluntary student engagement in saving energy if a plant/digital interface were introduced.
We postulate that people may be more inclined to participate in a “green” activity if they are more directly aware of the benefits. This project also seeks to discover if the introduction of nature (green plants) as the interface would encourage users to increase participation in socially responsive activities.

Our demonstration uses plants as the interface to offer an immediate sensory connection between the participants and the outcome of their chosen actions. This may generate a deeper awareness of the environment by enabling the participant to realise that their one small action in an ordinary day can contribute positively to larger global issues.

Meet Eater: Affectionate Computing, Social Networks and Human-Plant Interaction.

Bashkim Isari & Stephen Viller, University of Queensland

Plants need light and water to grow, but the Meet Eater is a plant which needs love and attention. Any green thumb will preach the importance of doting care, but such attention always falls alongside the traditional contributions of sun, water and nutrients. The Meet Eater takes those traditional elements away, replacing them with a want to be touched, a desire for online social interaction and the occasional need for quiet time.

The Meet Eater installation consists of a garden rigged up with a system to register physical contact and social media interaction. Watering is triggered by engaging with the plant on Facebook and the plant can also be interacted with physically by stroking it; which it responds with a gentle purr.

A (thriving) pot plant can be re-visualised as an ambient display of its owners’ dedication. A well kept plant is evidence of on-going love, care and attention. For people who spend years tending to their plant, it becomes more important than mere household bric-à-brac, it becomes mapped into its carers’ sense of place.

Behind this project is the idea that by introducing both physical and virtual levels of interaction the garden is able to make a transition from being an object to being a creature – one that you can befriend on the Internet no less. The data gathered by the installation is helping to further the understanding of how we sustain relationships through online social networking services.

http://www.facebook.com/meeteater

Iterative Design within a Local Community Communication Fabric - Demonstration of a Nnub Community Noticeboard

Fiona Redhead, Margot Breeton, Queensland University of Technology & Andrew Dekker, Ably Design

Our research considers the problem of designing support for local community communications. We demonstrate a situated display community touchscreen noticeboard that has been running in a local shop and in the State Library. The related short paper contributes an understanding of how iterative situated design in a user community can help us to design for participation in the use of technologies that can support growth of a community communication fabric. The different roles of the situated display and a tailored email digest are discussed.
field, and in particular practitioners from smaller organizations are understandably nervous about embarking on video projects out of fear that it is difficult to get consent in the first place, that the ethics is difficult to handle, that video shooting makes the social relations awkward, that the editing task is monumental, that equipment is difficult to handle etc.

This tutorial presents a light-weight entry into video field studies, using cheap devices like cell phones and portable webcams for informal shooting and simple computer handling for editing. E.g. how far can you get with an iPhone or a video capable iPod? Or with the GoPRO sports camera? Our approach has a strong focus on how to use video in design, rather than on the technical side. The goal is to engage design teams in meaningful discussions based on user empathy, rather than to produce beautiful videos. Basically it is a search for a minimalist way of achieving what usually requires trained shooting and editing with larger equipment.

This tutorial is being held in Room B223 on Level 2 of B Block.

WORKSHOPS

MONDAY in B223 Workshop on Natural User Interfaces: Multi-touch and Gestural Interactions
Aaron Tan, The University of Queensland

What is the next major evolution in user interaction? Graphical user interfaces brought a new strategy that was more effective compared to their command-line predecessors. In recent years, Natural User Interfaces (NUI) have advanced user experiences and we believe multi-touch and gesture technology to provide new opportunities for a variety of potential uses. How can these be leveraged in the design of interactive interfaces? Do gestures completely replace typical mouse pointers or simply augment it for some functionality? Do all applications work with gestures or only a select few?

This workshop is focused on discussing the role and nature of NUI within a variety of different academic and industry disciplines. NUI so far have been limited to technology demonstrations and research niche’s, and have failed to gather a foothold in traditional environments. While specific elements of NUI have been identified and studied, there is a clear lack of design standards and practices surrounding these interfaces. Primarily, NUI suffers from a lack of context within generic user interfaces, and is reserved for systems that represent tangible objects. The goal of this workshop is to make a first step in identifying challenges and characterising NUI design obstacles.

This workshop is being held in Room B223 on Level 2 of B Block.

TUESDAY in B224 Workshop on HCI and Game Interfaces: A Long Romance
Truna aka J Turner, Brisbane IGDA, ICI, Interaction & Visual Design & David Browning, James Cook University

This full day workshop invites participants to consider the nexus where the interests of game design, the expectations of play and HCI meet the game interface.

Game interfaces seem different to the interface to other software and there have been a number of observations. Shneiderman famously noticed that while most software designers are intent on following the tenets of the “invisible computer” and making access easy for the user, games interfaces are made for players: they embed challenge. Schell discusses a “strange” relationship between the player and the game enabled by the interface and user interface designers frequently opine that much can be learned from the design of game interfaces. So where does the game interface actually sit? Even more interesting is the question as to whether the history of the relationship and subsequent expectations are now limiting the potential of game design as an expressive form. Recent innovations in I/O design such as Nintendo’s Wii, Sony’s Move and Microsoft’s Kinect seem to usher in an age of physical player-enabled interaction, experience and embodied, engaged design. This workshop intends to cast light on this often mentioned and sporadically examined area and to establish a platform for new and innovative design in the field.

This workshop is being held in Room B224 on Level 2 of B Block.

TUESDAY in B505 Workshop on Smart Healthcare Applications
Carsten Röcker, Martina Ziefle, RWTH Aachen University, Andreas Holzinger, Medical University Graz, Susan Hansen, University of Technology Sydney & Martin G. Helander, Nanyang Technological University

Research in the area of smart healthcare systems has reached a point where significant improvements are only possible if academics and practitioners from various disciplines collaborate in order to develop new strategies for conceptualizing, designing, and implementing new applications.

The underlying strategies must be harmonized and balanced in two ways: first, within the technological areas, and second, regarding the integration of technologies into the medical, cognitive, and social context. This also includes the way technology acts within the life courses of individuals and societies, and the balance of the benefits that technology brings against perceived or actual medical, social as well as ethical drawbacks. Therefore, this workshop aims to bring together researchers and industry practitioners from different fields to share their research positions and practical experiences and discuss new ideas, innovative approaches and challenging research questions, which have the potential to motivate future research activities within the field of smart healthcare systems.

This workshop is being held in Room B505 on Level 5 of B Block.
24 hour student design challenge

The annual OZCHI Student Design Challenge is organised as two 24 hours events. The first event, the On-line Challenge took place on 25-26 September. A total of 44 teams with 132 participants from 10 countries took on the challenge with the theme “Space, the final frontier”.

Twenty-four teams successfully tackled the challenge within the given 24 hours and submitted a video illustrating their design solution. Our honoured judges, Margot Brereton, Michael Docherty, Suze Ingram, Markus Rittenbruch, Ricky Robinson, and Stephen Viller, evaluated the submissions and nominated the following top three teams:

Winner: Team Bo_part_Henrik - a 2 person team from the Department of Information and Media Studies, Aarhus University Denmark.

2nd prize: Team 4LEAF - 4 Design Computing students from the University of Sydney.

3rd position: Team MIA UTAS THING - a team of 3 students from UTAS, Tasmania, Australia.

The top two teams won a scholarship sponsored by our industry partner Microsoft Australia for attending the OZCHI conference. Papers describing how these top three teams addressed the challenge are included in the 2010 OZCHI Conference Proceedings. All submissions to the On-line Challenge are linked from the challenge website: http://ozchi-design.org/sdc-on-line-design-journals

The second event, the On-site Challenge, takes place in Brisbane on 22-23 November, preceding the OZCHI conference. The challenge commences with a workshop and our industry sponsors will issue a design challenge. Submissions to the On-site Challenge will be exhibited during the conference and the winner will be determined through audience voting as well as a panel of experts. The top three entries earn a Certificate of Recognition and prizes sponsored by our industry partners.

All students attending OZCHI are invited to join the On-site Challenge. All conference attendees are invited to attend the participants’ presentations the afternoon of 23rd November before the OZCHI welcome reception commences.

Follow us on Twitter for updates: @ozchi24

Or visit http://ozchi-design.org for more information

24 hr student design challenge chairs

Martin Tomitsch (The University of Sydney),
truna aka J.turner (Brisbane IGDA),
Jeremy Yuille (RMIT)
### About the Venue

The conference is being held in B Block of the Queensland University of Technology, Gardens Point Campus. Events running Wednesday through Friday will be held on Level 1 of B Block. Tutorials, workshops, the Doctoral Consortium and the Student Design Challenge will all be held in B Block (on Levels 2 & 5, see the program for room numbers).

All catering will be provided in D Block, across The Yard from B Block.

---

### Social Program

Information about smaller social events (e.g. walks and group dinners, places to visit) will be added to the OzCHI Social Events web page at www.ozchi.org and announced during the conference.

**Welcome Reception**

*Tuesday November 23, 6:00pm to 7:30pm*

The Welcome Reception will be held on the Tuesday evening of the conference at Old Government House from 6pm to 7:30pm.

Old Government House is located on the grounds of the conference venue at QUT and adjacent to the City Botanic Gardens. Old Government House is heritage listed and has recently been restored. The building was home to Queensland’s governors until 1910 and later became QUT’s inaugural building. In addition to housing a gallery and cafe, Old Government House acts as a museum with the building itself as the main historical artefact for people to visit.

**An afternoon at Lone Pine Koala Sanctuary**

*Tuesday November 23*

We are arranging a trip to the Lone Pine Koala Sanctuary on Tuesday afternoon. Lone Pine keeps Australian wildlife including koalas, kangaroos, crocodiles, snakes, platypus, and wombats. Visitors can hold and feed the friendlier varieties such as the koalas and kangaroos. Where & when to meet can be found on the OZCHI Social Events web page - www.ozchi.org

**Conference Dinner**

*Thursday November 25, 7:00pm*

The OzCHI Conference Dinner will be held on the Thursday evening of the conference at The Fix Restaurant (within the Port Office Hotel) on the corner of Edward & Margaret Street in the city from 7:00pm.

The Fix Restaurant is located a short walk from the conference venue and is close to other bars and cafes.

---

**Full-featured, industry-leading software from Adobe is available at low prices for students, teachers and faculty members who can save up to 80% off the full retail price on Creative Suite 5 Design Premium with Adobe Student and Teacher Editions.**

For further details and full eligibility conditions go to: http://www.adobe.com/ap/education/solutions/students/studentteacheredition/

Visit the Australian Education Online Store to purchase this product directly through the Adobe website.

For enquiries, send an email to: pacsales@adobe.com or call 02 8622 4117

---

**“Be creative. Be inspired. Be the best at what you do.”**

---

**“80% with Adobe CS5 Student & Teacher editions”**

---

**“Be creative. Be inspired. Be the best at what you do.”**

---

**“80% with Adobe CS5 Student & Teacher editions”**

---

**“Be creative. Be inspired. Be the best at what you do.”**
HOUSEKEEPING

Internet Access

Wireless internet access is available for delegates attending the OZCHI conference who have their own laptops. For instructions on how to access the wireless network, please see the volunteers at the OZCHI reception desk.

OZCHI iPhone App

Thanks to Secret Lab, there is an iPhone app available on the iTunes app store for your downloading pleasure. The app contains all you need to know about the conference in one place. Go to itunes.com/apps/OZCHI to get it now!

No Smoking

Smoking is prohibited within all buildings, or parts of building on QUT campuses, in any outdoor area of a food outlet, within 10 metres of any entrance to buildings, airconditioning intakes, or open windows. No Smoking signs are placed in any other area that falls under the Queensland University of Technology policy on smoking.

Gitte Lindgaard Award for the best long paper

The Gitte Lindgaard Award for the best long paper presented during OZCHI is presented during the closing session, Friday November 26 at 3:45pm. This award recognises not just the best written papers, but the combination of written work, along with the quality of the presentation and discussion around the work presented at the conference.

CHISIG Annual General Meeting

This important meeting is scheduled for Wednesday 24th November at 17:15 in B Block Room B117. Please attend if you are a member of CHISIG - with your proxies.

OZCHI 2011

The ACT CHISIG Chair, Duncan Stevenson, has proposed that OZCHI 2011 be held in Canberra at the Australian National University, with on-site sponsorship from the School of Computer Science. Specific dates for OZCHI 2011 will be announced at this year’s conference. Duncan is a Visiting Fellow at the ANU School of Computer Science and questions or comments about next year’s conference can be sent to him at duncan.stevenson@anu.edu.au, or speak to him during this year’s conference.

CHISIG COMMITTEE

National CHISIG Committee Members

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair</td>
<td>Cecile Paris</td>
<td><a href="mailto:chair@chisig.org">chair@chisig.org</a></td>
</tr>
<tr>
<td>Treasurer</td>
<td>Steve Roberts</td>
<td><a href="mailto:treasurer@chisig.org">treasurer@chisig.org</a></td>
</tr>
<tr>
<td>Secretary</td>
<td>Darius Pfitzner</td>
<td><a href="mailto:secretary@chisig.org">secretary@chisig.org</a></td>
</tr>
<tr>
<td>Membership Coordinator</td>
<td>Kenneth Trehane</td>
<td><a href="mailto:membership@chisig.org">membership@chisig.org</a></td>
</tr>
<tr>
<td>Web Coordinator</td>
<td>Regina Huntington</td>
<td><a href="mailto:webmaster@chisig.org">webmaster@chisig.org</a></td>
</tr>
<tr>
<td>Newsletter Editor</td>
<td>Vacant</td>
<td><a href="mailto:newsletter@chisig.org">newsletter@chisig.org</a></td>
</tr>
<tr>
<td>Conference Liaison</td>
<td>Duncan Stevenson</td>
<td><a href="mailto:ozchi@chisig.org">ozchi@chisig.org</a></td>
</tr>
<tr>
<td>HFESA Liaison</td>
<td>Steve Ward</td>
<td><a href="mailto:hfesa@chisig.org">hfesa@chisig.org</a></td>
</tr>
</tbody>
</table>

State CHISIG Committee Members

<table>
<thead>
<tr>
<th>State</th>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT</td>
<td>Duncan Stevenson</td>
<td><a href="mailto:actrep@chisig.org">actrep@chisig.org</a></td>
</tr>
<tr>
<td>QLD</td>
<td>Tania Lang</td>
<td><a href="mailto:qldrep@chisig.org">qldrep@chisig.org</a></td>
</tr>
<tr>
<td>NSW</td>
<td>Vacant</td>
<td><a href="mailto:nsrep@chisig.org">nsrep@chisig.org</a></td>
</tr>
<tr>
<td>SA</td>
<td>Vacant</td>
<td><a href="mailto:sarep@chisig.org">sarep@chisig.org</a></td>
</tr>
<tr>
<td>Tas</td>
<td>Christopher Leug</td>
<td><a href="mailto:tasrep@chisig.org">tasrep@chisig.org</a></td>
</tr>
<tr>
<td>VIC</td>
<td>Eleanor Tan</td>
<td><a href="mailto:vcrep@chisig.org">vcrep@chisig.org</a></td>
</tr>
<tr>
<td>WA</td>
<td>Vacant</td>
<td><a href="mailto:warep@chisig.org">warep@chisig.org</a></td>
</tr>
<tr>
<td>HFESA</td>
<td>Steve Ward</td>
<td><a href="mailto:hfesa@chisig.org">hfesa@chisig.org</a></td>
</tr>
<tr>
<td>Name</td>
<td>Organization</td>
<td>Email</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Bert Bongers</td>
<td>University of Technology Sydney (UTS) Design School</td>
<td>b <a href="mailto:bert.bongers@uts.edu.au">bert.bongers@uts.edu.au</a></td>
</tr>
<tr>
<td>Elizabeth Bott</td>
<td>Australian Taxation Office</td>
<td><a href="mailto:elizabeth.bott@ato.gov.au">elizabeth.bott@ato.gov.au</a></td>
</tr>
<tr>
<td>Eva Brandt</td>
<td>The Danish Design School</td>
<td><a href="mailto:ebrand@dkds.dk">ebrand@dkds.dk</a></td>
</tr>
<tr>
<td>Margot Brereton</td>
<td>Queensland University of Technology</td>
<td><a href="mailto:m.brereton@qut.edu.au">m.brereton@qut.edu.au</a></td>
</tr>
<tr>
<td>David Browning</td>
<td>James Cook University</td>
<td><a href="mailto:david.browning@jcu.edu.au">david.browning@jcu.edu.au</a></td>
</tr>
<tr>
<td>Patrick Burns</td>
<td>University of Tasmania</td>
<td><a href="mailto:patrick.burns@utas.edu.au">patrick.burns@utas.edu.au</a></td>
</tr>
<tr>
<td>Jacob Buur</td>
<td>University of Southern Denmark</td>
<td><a href="mailto:jacob.buur@smc.sdu.dk">jacob.buur@smc.sdu.dk</a></td>
</tr>
<tr>
<td>Brett Campbell</td>
<td>Australian Taxation Office</td>
<td><a href="mailto:brett.campbell@ato.gov.au">brett.campbell@ato.gov.au</a></td>
</tr>
<tr>
<td>Dianne Castillo Squiz</td>
<td>University of New South Wales</td>
<td><a href="mailto:dcs332@cse.unsw.edu.au">dcs332@cse.unsw.edu.au</a></td>
</tr>
<tr>
<td>Hilary Catherall</td>
<td>Australian Taxation Office</td>
<td><a href="mailto:hilary.catherall@ato.gov.au">hilary.catherall@ato.gov.au</a></td>
</tr>
<tr>
<td>Tamara Chahine</td>
<td>The University of Sydney</td>
<td><a href="mailto:tcha1746@uni.sydney.edu.au">tcha1746@uni.sydney.edu.au</a></td>
</tr>
<tr>
<td>Marianella Chamorro-Koc</td>
<td>Queensland University Of Technology</td>
<td><a href="mailto:m.chamorro@qut.edu.au">m.chamorro@qut.edu.au</a></td>
</tr>
<tr>
<td>Yun-Maw Kevin Cheng</td>
<td>Tatung University</td>
<td><a href="mailto:kevin@ttu.edu.tw">kevin@ttu.edu.tw</a></td>
</tr>
<tr>
<td>Kelvin Cheng</td>
<td>CSIRO</td>
<td><a href="mailto:kelvin.cheng@csiro.au">kelvin.cheng@csiro.au</a></td>
</tr>
<tr>
<td>Timothy Christie</td>
<td>University of Tasmania</td>
<td><a href="mailto:tsc@utas.edu.au">tsc@utas.edu.au</a></td>
</tr>
<tr>
<td>Elizabeth Churchill</td>
<td>Yahoo!</td>
<td><a href="mailto:echu@yahoo-inc.com">echu@yahoo-inc.com</a></td>
</tr>
<tr>
<td>Andrew Clayphan</td>
<td>The University of Sydney</td>
<td><a href="mailto:clayphan@gmail.com">clayphan@gmail.com</a></td>
</tr>
<tr>
<td>Nathalie Colineau</td>
<td>CSIRO - ICT Centre</td>
<td><a href="mailto:nathalie.colineau@csiro.au">nathalie.colineau@csiro.au</a></td>
</tr>
<tr>
<td>Roslyn Cooper</td>
<td>Australian Taxation Office</td>
<td><a href="mailto:roslyn.cooper@ato.gov.au">roslyn.cooper@ato.gov.au</a></td>
</tr>
<tr>
<td>Kirsten Corney</td>
<td>Australian Taxation Office</td>
<td><a href="mailto:kcorney@ato.gov.au">kcorney@ato.gov.au</a></td>
</tr>
<tr>
<td>Hilary Davis</td>
<td>University of Melbourne</td>
<td><a href="mailto:davish@unimelb.edu.au">davish@unimelb.edu.au</a></td>
</tr>
<tr>
<td>Andrew Dekker</td>
<td>The University of Queensland</td>
<td><a href="mailto:uqadk@qut.edu.au">uqadk@qut.edu.au</a></td>
</tr>
<tr>
<td>Sharon Dennison</td>
<td>Australian Taxation Office</td>
<td><a href="mailto:sharon.dennison@ato.gov.au">sharon.dennison@ato.gov.au</a></td>
</tr>
<tr>
<td>Matthew D’Orazio</td>
<td>University of Tasmania</td>
<td><a href="mailto:mdorazio@utas.edu.au">mdorazio@utas.edu.au</a></td>
</tr>
<tr>
<td>Paul Dourish</td>
<td>UC Irvine</td>
<td><a href="mailto:jpd@cs.uc.edu">jpd@cs.uc.edu</a></td>
</tr>
<tr>
<td>Margaret Emery</td>
<td>Centrelink</td>
<td><a href="mailto:margaret.emery@centrelink.gov.au">margaret.emery@centrelink.gov.au</a></td>
</tr>
<tr>
<td>Viv Farrell</td>
<td>Swinburne University</td>
<td><a href="mailto:vf@swin.edu.au">vf@swin.edu.au</a></td>
</tr>
<tr>
<td>Graham Farrell</td>
<td>Swinburne University</td>
<td><a href="mailto:gfarrell@swin.edu.au">gfarrell@swin.edu.au</a></td>
</tr>
<tr>
<td>Geraldine Fitzpatrick</td>
<td>Vienna University of Technology</td>
<td><a href="mailto:geraldine.fitzpatrick@tuwien.ac.at">geraldine.fitzpatrick@tuwien.ac.at</a></td>
</tr>
<tr>
<td>Zachary Fitz-Walter</td>
<td>Queensland University of Technology</td>
<td>zf <a href="mailto:Fitz-walter@qut.edu.au">Fitz-walter@qut.edu.au</a></td>
</tr>
<tr>
<td>Maria Foverskov</td>
<td>The Danish Design School</td>
<td><a href="mailto:mfo@dkds.dk">mfo@dkds.dk</a></td>
</tr>
<tr>
<td>Euan Fraser</td>
<td>University of Southern Denmark</td>
<td><a href="mailto:eufraser@student.sdu.dk">eufraser@student.sdu.dk</a></td>
</tr>
<tr>
<td>Karen Gatto</td>
<td>Centrelink</td>
<td><a href="mailto:karen.m.gatto@centrelink.gov.au">karen.m.gatto@centrelink.gov.au</a></td>
</tr>
<tr>
<td>Simon Gojkovic</td>
<td>Australian Taxation Office</td>
<td><a href="mailto:simon.gojkovic@ato.gov.au">simon.gojkovic@ato.gov.au</a></td>
</tr>
</tbody>
</table>
Kasper Jensen  
Aalborg University  
kj@create.aau.dk

Daniel Johnson  
Queensland University of Technology  
dm.johnson@qut.edu.au

Doris Jung  
University of Waikato  
d.jung@cs.waikato.ac.nz

Minna Karukka  
Nokia  
m.innkarukka@nokia.com

Brendan Keogh  
The University of Queensland  
keogh123@hotmail.com

Sung Jun Kim  
University of Melbourne  
sskim@phdgrad.unimelb.edu.au

Kinley Kinley  
Queensland University of Technology  
kinleyg@hotmail.com

Kon Konовалов  
Design By Science  
konsterg@gmail.com

Henrik Korsgaard  
henrikkorsgaard@gmail.com

Ben Kraai  
Queensland University of Technology  
b.kraai@qut.edu.au

Tania Lang  
Peak Usability  
tania@peakusability.com.au

Chunghwan Lee  
ETRI  
Chunghwan_Lee@ycos.co.kr

Patrick Lehane  
University of Southern Queensland

Jane Leow  
Star Track Express  
jane.leow@startrackexpress.com.au

Jane Li  
CSIRO  
jane.li@csiro.au

Ann Light  
Sheffield Hallam University  
alight@shu.ac.uk

Susan Loh  
Queensland University of Technology  
susan.loh@qut.edu.au

Christopher Lueg  
University of Tasmania  
christopherlueg@utas.edu.au

Lorna Macdonald  
The University of Queensland  
lorna@itee.uq.edu.au

Hugh Macdonald  
The Royal Melbourne Institute of Technology (RMIT)  
hugh.macdonald@rmit.edu.au

Chris Marmo  
The Royal Melbourne Institute of Technology (RMIT)  
chris.marmo@gmail.com

Dana McKay  
Swinburne University of Technology  
d.mckay@swin.edu.au

Richard Medland  
Queensland University of Technology  
richard.medland@qut.edu.au

Timothy Merritt  
National University of Singapore  
timothy.merritt@nus.edu.sg

Peter Michael  
Australian Taxation Office  
peter.michael@ato.gov.au

Wendy Miller  
Queensland University of Technology  
w2.miller@qut.edu.au

Seyed Hadi Minisae  
Queensland University of Technology  
s.minisae@qut.edu.au

Hasiah Mohamed  
Universiti Teknologi MARA

Ann Morrison  
Aalborg University  
morrison@create.aau.dk

Florian Nachreiner  
ANZ  
florian.nachreiner@anz.com

Marc Nothropp  
University of Tasmania  
mnothropp@postoffice.utas.edu.au

Timothy Nugent  
University of Tasmania  
t.rnugent@utas.edu.au

Masaki Omata  
University of Yamanashi  
masakio@yamanashi.ac.jp

Kanwal Pahwa  
IP Australia  
karan.pahwa@ipaust.com.au

Freya Palmer  
University of Bath  
f.j.palmer@bath.ac.uk

Cecile Paris  
CSIRO- ICT Centre  
cecile.paris@csiro.au
<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jon Pearce</td>
<td>The University of Melbourne</td>
<td><a href="mailto:jonmp@unimelb.edu.au">jonmp@unimelb.edu.au</a></td>
</tr>
<tr>
<td>Sonja Pedell</td>
<td>The University of Melbourne</td>
<td><a href="mailto:pedell@unimelb.edu.au">pedell@unimelb.edu.au</a></td>
</tr>
<tr>
<td>Caroline Plate</td>
<td>The Hiser Group</td>
<td>carolinhiser.com.au</td>
</tr>
<tr>
<td>Beryl Pimper</td>
<td>University of Auckland</td>
<td><a href="mailto:cameront@psy.otago.ac.nz">cameront@psy.otago.ac.nz</a></td>
</tr>
<tr>
<td>Vesna Popovic</td>
<td>Queensland University of Technology</td>
<td><a href="mailto:vesnap@qut.edu.au">vesnap@qut.edu.au</a></td>
</tr>
<tr>
<td>Jon Pearce</td>
<td>Charles Darwin University</td>
<td><a href="mailto:barbara.white@cdu.edu.au">barbara.white@cdu.edu.au</a></td>
</tr>
<tr>
<td>Martin Tomitsch</td>
<td>University of Sydney</td>
<td><a href="mailto:martin.tomitsch@sydney.edu.au">martin.tomitsch@sydney.edu.au</a></td>
</tr>
<tr>
<td>Heli Väätäjä</td>
<td>Tampere University of Technology</td>
<td><a href="mailto:heli.vaataja@tut.fi">heli.vaataja@tut.fi</a></td>
</tr>
<tr>
<td>Brenda Vander Linden</td>
<td>Aalto University</td>
<td><a href="mailto:brenda@vanderlindens.us">brenda@vanderlindens.us</a></td>
</tr>
<tr>
<td>Rune Veerasawmy</td>
<td>Aarhus University</td>
<td><a href="mailto:imvrvn@hum.au.dk">imvrvn@hum.au.dk</a></td>
</tr>
<tr>
<td>Frank Vetere</td>
<td>University of Melbourne</td>
<td><a href="mailto:fveteren@unimelb.edu.au">fveteren@unimelb.edu.au</a></td>
</tr>
<tr>
<td>Suleman Shahid</td>
<td>IT University of Copenhagen</td>
<td><a href="mailto:signeyndigegn@gmail.com">signeyndigegn@gmail.com</a></td>
</tr>
<tr>
<td>John Seely-Brown</td>
<td>PTG Global</td>
<td><a href="mailto:christians@ptg-global.com">christians@ptg-global.com</a></td>
</tr>
<tr>
<td>John Seely-Brown</td>
<td>Texas A&amp;M University</td>
<td><a href="mailto:johnseelybrown@gmail.com">johnseelybrown@gmail.com</a></td>
</tr>
<tr>
<td>Suleman Shahid</td>
<td>Tilburg University</td>
<td><a href="mailto:suleman.shahid@gmail.com">suleman.shahid@gmail.com</a></td>
</tr>
<tr>
<td>David Ayman Shamma</td>
<td>Yahoo!</td>
<td><a href="mailto:aymans@acm.org">aymans@acm.org</a></td>
</tr>
<tr>
<td>Wei Song</td>
<td>Queensland University of Technology</td>
<td><a href="mailto:wli.song@qut.edu.au">wli.song@qut.edu.au</a></td>
</tr>
<tr>
<td>Duncan Stevenson</td>
<td>Australian National University</td>
<td><a href="mailto:duncan.stevenson@anu.edu.au">duncan.stevenson@anu.edu.au</a></td>
</tr>
<tr>
<td>Susan Swain</td>
<td>Monash University</td>
<td><a href="mailto:susan.swain@monash.edu.au">susan.swain@monash.edu.au</a></td>
</tr>
<tr>
<td>Johny C.</td>
<td>The University of Melbourne</td>
<td><a href="mailto:johnyc@unimelb.edu.au">johnyc@unimelb.edu.au</a></td>
</tr>
<tr>
<td>Justin</td>
<td>University of Sydney</td>
<td><a href="mailto:justin@sydney.edu.au">justin@sydney.edu.au</a></td>
</tr>
<tr>
<td>Rick Robinson</td>
<td>National ICT Australia (NICTA)</td>
<td><a href="mailto:rickyrobinson@nicta.com.au">rickyrobinson@nicta.com.au</a></td>
</tr>
<tr>
<td>Kristoffer Reed</td>
<td>University of Tromsø</td>
<td><a href="mailto:kristofferroed@uit.no">kristofferroed@uit.no</a></td>
</tr>
<tr>
<td>Glynn Rogers</td>
<td>National ICT Australia (NICTA)</td>
<td><a href="mailto:glyn.rogers@intermode.on.net">glyn.rogers@intermode.on.net</a></td>
</tr>
<tr>
<td>Harry Rolif</td>
<td>University of Canterbury</td>
<td><a href="mailto:harryrolif@utas.edu.au">harryrolif@utas.edu.au</a></td>
</tr>
<tr>
<td>Anni Rowland-Campbell</td>
<td>Digital Brand</td>
<td><a href="mailto:anni@digitalbrand.org">anni@digitalbrand.org</a></td>
</tr>
<tr>
<td>Joanna Saad-Sulonen</td>
<td>Aalto University</td>
<td><a href="mailto:joanna.saad-sulonen@aalto.fi">joanna.saad-sulonen@aalto.fi</a></td>
</tr>
<tr>
<td>Christine Satchel</td>
<td>Queensland University of Technology</td>
<td><a href="mailto:satchel@unimelb.edu.au">satchel@unimelb.edu.au</a></td>
</tr>
<tr>
<td>Christian Sax</td>
<td>PTG Global</td>
<td><a href="mailto:christians@ptg-global.com">christians@ptg-global.com</a></td>
</tr>
<tr>
<td>John Seely-Brown</td>
<td>Texas A&amp;M University</td>
<td><a href="mailto:johnseelybrown@gmail.com">johnseelybrown@gmail.com</a></td>
</tr>
<tr>
<td>Suleman Shahid</td>
<td>Tilburg University</td>
<td><a href="mailto:suleman.shahid@gmail.com">suleman.shahid@gmail.com</a></td>
</tr>
<tr>
<td>David Ayman Shamma</td>
<td>Yahoo!</td>
<td><a href="mailto:aymans@acm.org">aymans@acm.org</a></td>
</tr>
<tr>
<td>Wei Song</td>
<td>Queensland University of Technology</td>
<td><a href="mailto:wli.song@qut.edu.au">wli.song@qut.edu.au</a></td>
</tr>
<tr>
<td>Duncan Stevenson</td>
<td>Australian National University</td>
<td><a href="mailto:duncan.stevenson@anu.edu.au">duncan.stevenson@anu.edu.au</a></td>
</tr>
<tr>
<td>Susan Swain</td>
<td>Monash University</td>
<td><a href="mailto:susan.swain@monash.edu.au">susan.swain@monash.edu.au</a></td>
</tr>
<tr>
<td>Johny C.</td>
<td>The University of Melbourne</td>
<td><a href="mailto:johnyc@unimelb.edu.au">johnyc@unimelb.edu.au</a></td>
</tr>
<tr>
<td>Justin</td>
<td>University of Sydney</td>
<td><a href="mailto:justin@sydney.edu.au">justin@sydney.edu.au</a></td>
</tr>
<tr>
<td>Rick Robinson</td>
<td>National ICT Australia (NICTA)</td>
<td><a href="mailto:rickyrobinson@nicta.com.au">rickyrobinson@nicta.com.au</a></td>
</tr>
<tr>
<td>Kristoffer Reed</td>
<td>University of Tromsø</td>
<td><a href="mailto:kristofferroed@uit.no">kristofferroed@uit.no</a></td>
</tr>
<tr>
<td>Glynn Rogers</td>
<td>National ICT Australia (NICTA)</td>
<td><a href="mailto:glyn.rogers@intermode.on.net">glyn.rogers@intermode.on.net</a></td>
</tr>
<tr>
<td>Harry Rolif</td>
<td>University of Canterbury</td>
<td><a href="mailto:harryrolif@utas.edu.au">harryrolif@utas.edu.au</a></td>
</tr>
<tr>
<td>Anni Rowland-Campbell</td>
<td>Digital Brand</td>
<td><a href="mailto:anni@digitalbrand.org">anni@digitalbrand.org</a></td>
</tr>
<tr>
<td>Joanna Saad-Sulonen</td>
<td>Aalto University</td>
<td><a href="mailto:joanna.saad-sulonen@aalto.fi">joanna.saad-sulonen@aalto.fi</a></td>
</tr>
<tr>
<td>Christine Satchel</td>
<td>Queensland University of Technology</td>
<td><a href="mailto:satchel@unimelb.edu.au">satchel@unimelb.edu.au</a></td>
</tr>
<tr>
<td>Christian Sax</td>
<td>PTG Global</td>
<td><a href="mailto:christians@ptg-global.com">christians@ptg-global.com</a></td>
</tr>
<tr>
<td>John Seely-Brown</td>
<td>Texas A&amp;M University</td>
<td><a href="mailto:johnseelybrown@gmail.com">johnseelybrown@gmail.com</a></td>
</tr>
<tr>
<td>Suleman Shahid</td>
<td>Tilburg University</td>
<td><a href="mailto:suleman.shahid@gmail.com">suleman.shahid@gmail.com</a></td>
</tr>
<tr>
<td>David Ayman Shamma</td>
<td>Yahoo!</td>
<td><a href="mailto:aymans@acm.org">aymans@acm.org</a></td>
</tr>
<tr>
<td>Wei Song</td>
<td>Queensland University of Technology</td>
<td><a href="mailto:wli.song@qut.edu.au">wli.song@qut.edu.au</a></td>
</tr>
<tr>
<td>Duncan Stevenson</td>
<td>Australian National University</td>
<td><a href="mailto:duncan.stevenson@anu.edu.au">duncan.stevenson@anu.edu.au</a></td>
</tr>
<tr>
<td>Susan Swain</td>
<td>Monash University</td>
<td><a href="mailto:susan.swain@monash.edu.au">susan.swain@monash.edu.au</a></td>
</tr>
<tr>
<td>Johny C.</td>
<td>The University of Melbourne</td>
<td><a href="mailto:johnyc@unimelb.edu.au">johnyc@unimelb.edu.au</a></td>
</tr>
<tr>
<td>Justin</td>
<td>University of Sydney</td>
<td><a href="mailto:justin@sydney.edu.au">justin@sydney.edu.au</a></td>
</tr>
<tr>
<td>Rick Robinson</td>
<td>National ICT Australia (NICTA)</td>
<td><a href="mailto:rickyrobinson@nicta.com.au">rickyrobinson@nicta.com.au</a></td>
</tr>
<tr>
<td>Kristoffer Reed</td>
<td>University of Tromsø</td>
<td><a href="mailto:kristofferroed@uit.no">kristofferroed@uit.no</a></td>
</tr>
<tr>
<td>Glynn Rogers</td>
<td>National ICT Australia (NICTA)</td>
<td><a href="mailto:glyn.rogers@intermode.on.net">glyn.rogers@intermode.on.net</a></td>
</tr>
<tr>
<td>Harry Rolif</td>
<td>University of Canterbury</td>
<td><a href="mailto:harryrolif@utas.edu.au">harryrolif@utas.edu.au</a></td>
</tr>
<tr>
<td>Anni Rowland-Campbell</td>
<td>Digital Brand</td>
<td><a href="mailto:anni@digitalbrand.org">anni@digitalbrand.org</a></td>
</tr>
<tr>
<td>Joanna Saad-Sulonen</td>
<td>Aalto University</td>
<td><a href="mailto:joanna.saad-sulonen@aalto.fi">joanna.saad-sulonen@aalto.fi</a></td>
</tr>
<tr>
<td>Christine Satchel</td>
<td>Queensland University of Technology</td>
<td><a href="mailto:satchel@unimelb.edu.au">satchel@unimelb.edu.au</a></td>
</tr>
<tr>
<td>Christian Sax</td>
<td>PTG Global</td>
<td><a href="mailto:christians@ptg-global.com">christians@ptg-global.com</a></td>
</tr>
<tr>
<td>John Seely-Brown</td>
<td>Texas A&amp;M University</td>
<td><a href="mailto:johnseelybrown@gmail.com">johnseelybrown@gmail.com</a></td>
</tr>
<tr>
<td>Suleman Shahid</td>
<td>Tilburg University</td>
<td><a href="mailto:suleman.shahid@gmail.com">suleman.shahid@gmail.com</a></td>
</tr>
<tr>
<td>David Ayman Shamma</td>
<td>Yahoo!</td>
<td><a href="mailto:aymans@acm.org">aymans@acm.org</a></td>
</tr>
<tr>
<td>Wei Song</td>
<td>Queensland University of Technology</td>
<td><a href="mailto:wli.song@qut.edu.au">wli.song@qut.edu.au</a></td>
</tr>
<tr>
<td>Duncan Stevenson</td>
<td>Australian National University</td>
<td><a href="mailto:duncan.stevenson@anu.edu.au">duncan.stevenson@anu.edu.au</a></td>
</tr>
</tbody>
</table>
OZCHI 2010 REVIEWERS

Anya Adair
Sisira Adikari
David Alshtröm
truna aka j.turner
Ameer Al-Nemrat
Leila Alem
Teresa Almeida
Michelle Annett
Shawn Ashkanasy
Mads Bödker
Hanif Baharin
Mark Bilandzic
Mark Billinghurst
Thea Blackder
Elia Blevis
Marie Boden
Ali Boyali
Andrew Boyd
Daniel Bradley
Margot Breterton
Martin Brymskov
Marina Buzzi
William Cartwright
Marianella Chamorro
Enk Champion
Keith Cheverst
Torkil Clemmensen
Stefan Cronholm
Bharat Dave
Alexander De Luca
Andrew Dekker
Steve Dillon
Natalie Ebenreuter
Vivienne Farrell
Frank Feltham
Marcus Foth
Jonas Frisch
Alexia Fry
Gerry Gaffney
Mark Gaved
Rich Gazan
Guillaume Gibert
Alain Giboin
Rafael Gomez
Victor M Gonzalez
Connor Graham
John Grundy
Raghavendra Reddy
Gudur
Penny Hagen
Jillian Hamilton
Dean Hargreaves
Mitchell Harrop
Rene Havel
Cint Heyer
Syrinjanor Hisham
Steve Howard
Peizhao Hu
Wendy Hui
Renato lannella
Kasper Loevgborg
Jensen
Daniel Johnson
Peter Jones
Jo jung
Konstantinos Kazakos
Elizabeth Kemp
Denisa Kera
Khamsun Kinley
A. Baki Kocaballi
Ben Kraal
Daryl K
Astrid T Larsen
Chao-Lung Lee
Pat Lehane
Tuck Leong
Linda Leung
Jane Li
Hai-Ning Liang
Tek Yong Lim
Susan Loh
Lian Loke
Christopher Lueg
Ian MacColl
Lorna Macdonald
Hugh Macdonald
Petri Mannonen
Tim Mansfield
Masood Masoodian
Rohan McAdam
Gregor McEwan
Dana McKay
Tim Merritt
Seyed Hadi Mirisaee
Hasihah Mohamed
Omar
Ann Morrison
Ralf Muhlberger
Ather Nawaz
Kenton O’Hara
Thilo Paul-Stueve
Jon Pearce
Sonja Pedell
Nilma Perera
James Phillips
Michael Pilling
Beryl Plimmer
Bemrd Ploderer
Vesna Popovic
Asim Qayyum
Ken Radke
Dimitrios Raptis
Fiona Redhead
Holger Regenbrecht
Yann Riche
E. Sean Rintel
Markus Rittenbruch
Toni Robertson
Ricky Robinson
Gavin Sade
Daniel Salber
Christine Satchell
Stefan Schutt
Jan Seeburger
Nilanthi Seneviratne
Supriya Singh
Wei Song
Duncan Stevenson
Cara Sitzlein
Susanne Tak
Nick Taylor
Bruce Thomas
Mark Toleman
Martin Tomitsch
Nikolaos Tsilos
Heli Vääntäjä
Ron van Schyndel
Frank Vetere
Stephen Viller
Lejla Vrazalic
Greg Wadley
Patrick Watson
Danielle Wilde
Matthew Willis
Laurie Wilson
Tania Xiao
Jason Yang
Yaohua Yu

OZCHI 2010 STUDENT VOLUNTEERS

OZCHI 2010 would not be what it is without the fantastic volunteers who run around helping out, before, during and after the conference, making sure that everyone is having a great conference experience. These volunteers welcome participants, give directions, help in the sessions and with WiFi access, produce the booklets, USB contents and websites and generally make sure the conference is running smoothly.

Seyed Hadi Mirisaee, Queensland University Technology
Ellya Zulaikha, Queensland University Technology
Kenneth Radke, Queensland University Technology
Fiona Redhead, Queensland University Technology
Elisabeth Zeiter, Queensland University Technology
Andrew Dekker, University of Queensland
Yvonne Gora, RMIT (Royal Melbourne Institute of Technology)
Susan Hansen, University of Technology Sydney
Maria Foverskov, The Danish Design School, Copenhagen, Denmark
Jason Yang, University of Queensland
Tamara Chahine, University of Sydney
## ACKNOWLEDGEMENTS

### Organising Committee

OZCHI 2010 has been convened by:

<table>
<thead>
<tr>
<th>Category</th>
<th>Chair(s)</th>
<th>Institution(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference Chair</td>
<td>Margot Brereton</td>
<td>Queensland University of Technology</td>
</tr>
<tr>
<td>Technical Program Chairs</td>
<td>Stephen Viller, Ben Kraal</td>
<td>The University of Queensland, Queensland University of Technology</td>
</tr>
<tr>
<td>Short Papers, Industry Case Studies</td>
<td>Ricky Robinson, Mads Bodker</td>
<td>National ICT Australia (NICTA), Copenhagen Business School,</td>
</tr>
<tr>
<td>Demonstrations</td>
<td>Margot Brereton, Michael Docherty</td>
<td>Queensland University of Technology</td>
</tr>
<tr>
<td>Panels</td>
<td>Margot Brereton</td>
<td>Queensland University of Technology</td>
</tr>
<tr>
<td>Workshops &amp; Tutorials</td>
<td>Peta Wyeth, Michael Docherty</td>
<td>Queensland University of Technology</td>
</tr>
<tr>
<td>Industry Case Studies</td>
<td>Brett Campbell, Megan Bauer</td>
<td>Australian Tax Office (ATO), Telstra</td>
</tr>
<tr>
<td>Doctoral Consortium</td>
<td>Frank Vetere, Jillian Hamilton</td>
<td>The University of Melbourne, Queensland University of Technology</td>
</tr>
<tr>
<td>Social Chair</td>
<td>Fiona Redhead</td>
<td>Queensland University of Technology</td>
</tr>
<tr>
<td>Student Design Challenge</td>
<td>Martin Tomitsch, Jane [Truna] Turner, Jeremy Yuille</td>
<td>The University of Sydney, Queensland University of Technology, Royal Melbourne Institute of Technology (RMIT)</td>
</tr>
<tr>
<td>Student Volunteer Chairs</td>
<td>Ellya Zulaikha, Seyed Mirisaee</td>
<td>Queensland University of Technology</td>
</tr>
<tr>
<td>PDC Liaison</td>
<td>Toni Robertson</td>
<td>University of Technology Sydney</td>
</tr>
<tr>
<td>OZCHI2011 Liaison</td>
<td>Duncan Stevenson</td>
<td>Australian National University</td>
</tr>
<tr>
<td>Webmasters</td>
<td>Hadi Mirasee, Fiona Redhead, Ben Kraal</td>
<td>Queensland University of Technology, Queensland University of Technology, Queensland University of Technology</td>
</tr>
<tr>
<td>CHISIG Liaison</td>
<td>Steve Roberts</td>
<td>National Australia Bank (NAB)</td>
</tr>
<tr>
<td>Proceedings/Handbook</td>
<td>Andrew Dekker, Lorna Macdonald</td>
<td>The University of Queensland, The University of Queensland</td>
</tr>
</tbody>
</table>
THANK YOU TO OUR SPONSORS!

Queensland University of Technology
[Keynote by John Seely-Brown & Toni Robertson]

Deloitte
[Keynote by Jacob Buur]

PTG Global
[Lanyards]

NICTA
National ICT Australia (NICTA)
[Keynote by Elizabeth Churchill]

Microsoft
[Student Design Challenge]

CSIRO
[Student Volunteers]

Adobe
[Prizes]

Symplicit
[Tote Bags]

Smart Services CRC
[Doctoral Consortium]