

Table of Contents

The CareNet Display: Lessons Learned from an In Home Evaluation of an Ambient Display	1
<i>Sunny Consolvo (Intel Research Seattle), Peter Roessler (Intel Research Seattle), Brett E. Shelton (Intel Research Seattle)</i>	
Personalized Peripheral Information Awareness Through Information Art	18
<i>John Stasko (Georgia Institute of Technology), Todd Miller (Georgia Institute of Technology), Zachary Pousman (Georgia Institute of Technology), Christopher Plaue (Georgia Institute of Technology), Osman Ullah (Georgia Institute of Technology)</i>	
Reminding About Tagged Objects Using Passive RFIDs	36
<i>Gaetano Borriello (University of Washington and Intel Research Seattle), Waylon Brunette (University of Washington), Matthew Hall (University of Washington), Carl Hartung (University of Washington), Cameron Tangney (University of Washington)</i>	
Evaluating the Effects of Displaying Uncertainty in Context-Aware Applications.....	54
<i>Stavros Antifakos (ETH Zurich), Adrian Schwaninger (University of Zurich and Max Planck Institute for Biological Cybernetics), Bernt Schiele (ETH Zurich and Darmstadt University of Technology)</i>	
The Error of Our Ways: The Experience of Self-Reported Position in a Location-Based Game	70
<i>Steve Benford (University of Nottingham), Will Seager (University of Nottingham), Martin Flintham (University of Nottingham), Rob Anastasi (University of Nottingham), Duncan Rowland (University of Nottingham), Jan Humble (University of Nottingham), Danaë Stanton (University of Nottingham), John Bowers (University of Nottingham), Nick Tandavanitj (Blast Theory, London), Matt Adams (Blast Theory, London), Ju Row Farr (Blast Theory, London), Amanda Oldroyd (BT Exact, Ipswich), Jon Sutton (BT Exact, Ipswich)</i>	
Particle Filters for Location Estimation in Ubiquitous Computing: A Case Study	88
<i>Jeffrey Hightower (Intel Research Seattle and University of Washington), Gaetano Borriello (Intel Research Seattle and University of Washington)</i>	

XIV Table of Contents

Some Assembly Required: Supporting End-User Sensor Installation in Domestic Ubiquitous Computing Environments	107
<i>Chris Beckmann (Intel Research Seattle), Sunny Consolvo (Intel Research Seattle), Anthony LaMarca (Intel Research Seattle)</i>	
Rapid Authoring of Mediascapes	125
<i>Richard Hull (Hewlett-Packard Laboratories), Ben Clayton (University of Bristol), Tom Melamed (University of Bristol)</i>	
CAMP: A Magnetic Poetry Interface for End-User Programming of Capture Applications for the Home	143
<i>Khai N. Truong (Georgia Institute of Technology), Elaine M. Huang (Georgia Institute of Technology), Gregory D. Abowd (Georgia Institute of Technology)</i>	
Designing Capture Applications to Support the Education of Children with Autism	161
<i>Gillian R. Hayes (Georgia Institute of Technology), Julie A. Kientz (Georgia Institute of Technology), Khai N. Truong (Georgia Institute of Technology), David R. White (Georgia Institute of Technology), Gregory D. Abowd (Georgia Institute of Technology), Trevor Pering (Intel Research, Santa Clara)</i>	
‘This All Together, Hon?’ Ubicomp in Non-office Work Environments	179
<i>John Sherry (Intel Corporation), Scott Mainwaring (Intel Corporation), Jenna Burrell (Intel Corporation), Richard Beckwith (Intel Corporation), Tony Salvador (Intel Corporation)</i>	
Security and Trust in Mobile Interactions: A Study of Users’ Perceptions and Reasoning	196
<i>Tim Kindberg (Hewlett-Packard Laboratories), Abigail Sellen (Hewlett-Packard Laboratories), Erik Geelhoed (Hewlett-Packard Laboratories)</i>	
WatchMe: Communication and Awareness Between Members of a Closely-Knit Group	214
<i>Natalia Marmasse (MIT), Chris Schmandt (MIT), David Spectre (MIT)</i>	
Everyday Encounters with Context-Aware Computing in a Campus Environment	232
<i>Louise Barkhuus (The IT University of Copenhagen), Paul Dourish (University of California)</i>	

Cooperative Artefacts: Assessing Real World Situations with Embedded Technology	250
<i>Martin Strohbach (Lancaster University), Hans-Werner Gellersen (Lancaster University), Gerd Kortuem (Lancaster University), Christian Kray (Lancaster University)</i>	
I Sense a Disturbance in the Force: Unobtrusive Detection of Interactions with RFID-tagged Objects	268
<i>Kenneth P. Fishkin (Intel Research Seattle), Bing Jiang (Intel Research Seattle and University of Washington), Matthai Philipose (Intel Research Seattle), Sumit Roy (University of Washington)</i>	
The NearMe Wireless Proximity Server	283
<i>John Krumm (Microsoft Research), Ken Hinckley (Microsoft Research)</i>	
The ContextCam: Automated Point of Capture Video Annotation	301
<i>Shwetak N. Patel (Georgia Institute of Technology), Gregory D. Abowd (Georgia Institute of Technology)</i>	
MouseField: A Simple and Versatile Input Device for Ubiquitous Computing	319
<i>Toshiyuki Masui (AIST), Koji Tsukada (Keio University), Itiro Siiro (Tamagawa University)</i>	
The Iterative Design Process of a Location-Aware Device for Group Use	329
<i>Holger Schnädelbach (University of Nottingham), Boriana Koleva (University of Nottingham), Mike Twidale (University of Illinois), Steve Benford (University of Nottingham)</i>	
DOLPHIN: A Practical Approach for Implementing a Fully Distributed Indoor Ultrasonic Positioning System	347
<i>Masateru Minami (Shibaura Institute of Technology), Yasuhiro Fukuju (University of Tokyo), Kazuki Hirasawa (Shibaura Institute of Technology), Shigeaki Yokoyama (Shibaura Institute of Technology), Moriyuki Mizumachi (Shibaura Institute of Technology), Hiroyuki Morikawa (University of Tokyo), Tomonori Aoyama (University of Tokyo)</i>	
The Carrot Approach: Encouraging Use of Location Systems	366
<i>Kieran Mansley (Cambridge University), Alastair R. Beresford (Cambridge University), David Scott (Cambridge University)</i>	
ActiveBelt: Belt-Type Wearable Tactile Display for Directional Navigation	384
<i>Koji Tsukada (Keio University), Michiaki Yasumura (Keio University)</i>	

XVI Table of Contents

An Audio-Based Personal Memory Aid	400
<i>Sunil Vemuri (MIT), Chris Schmandt (MIT), Walter Bender (MIT), Stefanie Tellex (MIT), Brad Lassey (MIT)</i>	
Infrastructures and Their Discontents: Implications for Ubicomp	418
<i>Scott D. Mainwaring (Intel Research), Michele F. Chang (Intel Research), Ken Anderson (Intel Research)</i>	
Opportunity Knocks: A System to Provide Cognitive Assistance with Transportation Services	433
<i>Donald J. Patterson (University of Washington), Lin Liao (University of Washington), Krzysztof Gajos (University of Washington), Michael Collier (University of Washington), Nik Livic (University of Washington), Katherine Olson (University of Washington), Shiaokai Wang (University of Washington), Dieter Fox (University of Washington), Henry Kautz (University of Washington)</i>	
Author Index	451