

Table of Contents

Invited Talks

The SAHARA Model for Service Composition across Multiple Providers	1
<i>Bhaskaran Raman, Sharad Agarwal, Yan Chen, Matthew Caesar, Weidong Cui, Per Johansson, Kevin Lai, Tal Lavian, Sridhar Machiraju, Z. Morley Mao, George Porter, Timothy Roscoe, Mukund Seshadri, Jimmy Shih, Keith Sklower, Lakshminarayanan Subramanian, Takashi Suzuki, Shelley Zhuang, Anthony D. Joseph, Randy H. Katz, Ion Stoica</i>	

Ubiquitous Computing in the Automotive Domain	15
<i>Ralf G. Herrtwich</i>	

System Design

Building Applications for Ubiquitous Computing Environments	16
<i>Christopher K. Hess, Manuel Román, Roy H. Campbell</i>	

Systems Support for Ubiquitous Computing: A Case Study of Two Implementations of Labscape	30
<i>Larry Arnstein, Robert Grimm, Chia-Yang Hung, Jong Hee Kang, Anthony LaMarca, Gary Look, Stefan B. Sigurdsson, Jing Su, Gaetano Borriello</i>	

On the Gap between Vision and Feasibility	45
<i>Christopher Lueg</i>	

Applications

The Fastap Keypad and Pervasive Computing	58
<i>David Levy</i>	

Going Back to School: Putting a Pervasive Environment into the Real World	69
<i>Victor Bayon, Tom Rodden, Chris Greenhalgh, Steve Benford</i>	

Pervasive Web Access via Public Communication Walls	84
<i>Alois Ferscha, Simon Vogl</i>	

Identification and Authentication

Efficient Object Identification with Passive RFID Tags	98
<i>Harald Vogt</i>	

The Untrusted Computer Problem and Camera-Based Authentication 114
*Dwaine Clarke, Blaise Gassend, Thomas Kotwal, Matt Burnside,
Marten van Dijk, Srinivas Devadas, Ronald Rivest*

Models, Platforms, and Architectures

SoapBox: A Platform for Ubiquitous Computing Research and
Applications 125
Esa Tuulari, Arto Ylisaukko-oja

Pushpin Computing System Overview: A Platform for Distributed,
Embedded, Ubiquitous Sensor Networks 139
Joshua Lifton, Deva Seetharam, Michael Broxton, Joseph Paradiso

Making Sensor Networks Practical with Robots 152
*Anthony LaMarca, Waylon Brunette, David Koizumi, Matthew Lease,
Stefan B. Sigurdsson, Kevin Sikorski, Dieter Fox,
Gaetano Borriello*

Modeling Context Information in Pervasive Computing Systems 167
Karen Henricksen, Jadwiga Indulska, Andry Rakotonirainy

A Model for Software Configuration in Ubiquitous Computing
Environments 181
Simon Schubiger-Banz, Béat Hirsbrunner

INS/Twine: A Scalable Peer-to-Peer Architecture for Intentional
Resource Discovery 195
Magdalena Balazinska, Hari Balakrishnan, David Karger

Location and Mobility

Location Estimation Indoors by Means of Small Computing Power
Devices, Accelerometers, Magnetic Sensors, and Map Knowledge 211
*Elena Vildjiounaite, Esko-Juhani Malm, Jouni Kaartinen,
Petteri Alahuhta*

Estimating the Benefit of Location-Awareness for Mobile Data
Management Mechanisms 225
Uwe Kubach, Kurt Roethermel

iCAMS: A Mobile Communication Tool Using Location and Schedule
Information 239
*Yasuto Nakanishi, Kazunari Takahashi, Takayuki Tsuji,
Katsuya Hakozaki*

Device Independence and Content Distribution

Browser State Repository Service	253
<i>Henry Song, Hao-hua Chu, Nayeem Islam, Shoji Kurakake, Masaji Katagiri</i>	
Annotation by Transformation for the Automatic Generation of Content Customization Metadata	267
<i>Masahiro Hori, Kouichi Ono, Teruo Koyanagi, Mari Abe</i>	
SCAN: A Dynamic, Scalable, and Efficient Content Distribution Network	282
<i>Yan Chen, Randy H. Katz, John D. Kubiatoicz</i>	
Author Index	297



<http://www.springer.com/978-3-540-44060-4>

Pervasive Computing

First International Conference, Pervasive 2002, Zürich,
Switzerland, August 26-28, 2002. Proceedings

Mattern, F.; Naghshineh, M. (Eds.)

2002, XII, 304 p., Softcover

ISBN: 978-3-540-44060-4