

An Excellent Addition to Your Library!

Released: September 2012

Pervasive and Ubiquitous Technology Innovations for Ambient Intelligence Environments

Kevin Curran (University of Ulster, UK)

Ambient intelligence began as a vision for the future of technology and has now become a reality. The widespread use of modern technology has quickly expanded into the use of our everyday lives. On a daily basis, we are instantly connected to people, places, ideas, and information which have led to the acceleration of knowledge. As the continuing development of new technologies becomes available, those technologies will play an integral role in the future.

Pervasive and Ubiquitous Technology Innovations for Ambient Intelligence Environments is a collection of research on the subject matter of human computer interaction, ubiquitous computing, embedded systems, and other areas of study which contribute to ambient intelligence. This comprehensive reference aims to broaden the overall knowledge on ambient intelligence as it relates to the aspects of modern life.

Topics Covered:

- Ambient Intelligence for Smart Home Environments
- Ambient Networks
- Analysis, Design, Implementation, and Evaluation of Ambient Computing Systems and Environments
- Applications and Experience with Deployed Systems
- Automatic Configuration of Applications for Intelligent Environments and End-User Support
- Communication Systems and Infrastructure for Ambient Intelligence
- Context Awareness
- Human Interaction with Autonomous Systems
- Innovative Applications of AI to Ambient Intelligence
- Interacting with Ambient Intelligence
- Mobile Computing
- Security, Privacy, and Trust in Ambient Computing

Market: This premier publication is essential for all academic and research library reference collections. It is a crucial tool for academicians, researchers, and practitioners and is ideal for classroom use.

Kevin Curran, BSc (Hons), PhD, SMIEEE, FBCS CTP, SMACM, FHEA, is a Reader in Computer Science at the University of Ulster and group leader for the Ambient Intelligence Research Group. His achievements include winning and managing UK & European Framework projects and 'Technology' Transfer Schemes. Dr. Curran has made significant contributions to advancing the knowledge and understanding of computer networking and systems, evidenced by over 700 published works. He is perhaps most well-known for his work on location positioning within indoor environments, pervasive computing, and internet security. His expertise has been acknowledged by invitations to present his work at international conferences, overseas universities, and research laboratories. He is a regular contributor to BBC Radio & TV news in the UK and is currently the recipient of an Engineering and Technology Board Visiting Lectureship for Exceptional Engineers and is an IEEE Technical Expert for Internet/Security matters. He is listed in the Dictionary of International Biography, Marquis Who's Who in Science and Engineering, and in Who's Who in the World. Dr. Curran was awarded the Certificate of Excellence for Research in 2004 by Science Publications and was named Irish Digital Media Newcomer of the Year Award in 2006. Dr. Curran has performed external panel duties for various Irish Higher Education Institutions. He is a fellow of the British Computer Society (FBCS), a senior member of the Association for Computing Machinery (SMACM), a senior member of the Institute of Electrical and Electronics Engineers (SMIEEE), and a fellow of the higher education academy (FHEA). Dr. Curran's stature and authority in the international community is demonstrated by his influence, particularly in relation to the direction of research in computer science. He has chaired sessions and participated in the organising committees for many highly-respected international conferences and workshops. He is the Editor in Chief of the *International Journal of Ambient Computing and Intelligence* and is also a member of 15 journal editorial committees and numerous international conference organising committees. He has authored a number of books and is the recipient of various patents. He has served as an advisor to the British Computer Society in regard to the computer industry standards and is a member of BCS and IEEE Technology Specialist Groups and various other professional bodies.

Chapter 1

Analysis of the Effect of Human Presence on a Wireless Sensor Network

Graham Ben (Letterkenny Institute of Technology, Ireland)
Tachtatzis Christos (Letterkenny Institute of Technology, Ireland)
Di Franco Fabio (Letterkenny Institute of Technology, Ireland)
Bykowski Marek (Letterkenny Institute of Technology, Ireland)
Tracey David C. (Letterkenny Institute of Technology, Ireland)
Timmons Nick F. (Letterkenny Institute of Technology, Ireland)
Morrison Jim (Letterkenny Institute of Technology, Ireland)

Chapter 2

Cloud Computing Security

Carlin Sean (University of Ulster, UK)
Curran Kevin (University of Ulster, UK)

Chapter 3

Future Multimedia System:

Murray Niall (Athlone Institute of Technology, Ireland)
Qiao Yuansong (Athlone Institute of Technology, Ireland)
Lee Brian (Athlone Institute of Technology, Ireland)
Fallon Enda (Athlone Institute of Technology, Ireland)
Karunakar A K (Athlone Institute of Technology, Ireland)

Chapter 4

IT-ASSIST:

Ahlrichs Claas (Universitaet Bremen, Germany)
Kohlsdorf Daniel (Universitaet Bremen, Germany)
Lawo Michael (Universitaet Bremen, Germany)
Kalkbrenner Gerrit (Universitaet Bremen, Germany)

Chapter 5

Analysis of Older Users' Perceived Requests and Opportunities with Technologies:

Gonzalez Mari Feli (Fundación Instituto Gerontológico Matia - INGEMA, Spain)
Facal David (Fundación Instituto Gerontológico Matia - INGEMA, Spain)
Navarro Ana Belen (Fundación Instituto Gerontológico Matia - INGEMA, Spain)
Geven Arjan (CURE – Center for Usability Research and Engineering, Austria)
Tscheligi Manfred (CURE – Center for Usability Research and Engineering, Austria)
Urdaneta Elena (Fundación Instituto Gerontológico Matia - INGEMA, Spain)
Yanguas Javier (Fundación Instituto Gerontológico Matia - INGEMA, Spain)

Chapter 6

AmbiLearn:

Hyndman Jennifer (University of Ulster, UK)
Lunney Tom (University of Ulster, UK)
Mc Keivitt Paul (University of Ulster, UK)

Chapter 7

SYLPH:

Alonso Ricardo S. (University of Salamanca, Spain)
Tapia Dante I. (University of Salamanca, Spain)
Corchado Juan M. (University of Salamanca, Spain)

Chapter 8

The Role of Augmented Reality within Ambient Intelligence

Curran Kevin (University of Ulster, UK)
McFadden Denis (University of Ulster, UK)
Devlin Ryan (University of Ulster, UK)

Chapter 9

An Antiwindup Approach to Power Controller Switching in an Ambient Healthcare Network

Walsh Michael J. (University College Cork, Ireland)
Barton John (University College Cork, Ireland)
O'Flynn Brendan (University College Cork, Ireland)
Hayes Martin J. (University of Limerick, Ireland)
O'Mathuna Cian (University College Cork, Ireland)
Alavi Seyed Mohammad Mahdi (Simon Fraser University, Canada)

Chapter 10

Investigating Cybercrimes that Occur on Documented P2P Networks

Scanlon Mark (University College Dublin, Ireland)
Hannaway Alan (University College Dublin, Ireland)
Kechadi Mohand-Tahar (University College Dublin, Ireland)

Chapter 11

Development and Evaluation of a Dataset Generator Tool for Generating Synthetic Log Files Containing Computer Attack Signatures

O'Shaughnessy Stephen (Institute of Technology Blanchardstown, Ireland)
Gray Geraldine (Institute of Technology Blanchardstown, Ireland)

Chapter 12

Making the Case for "Architectural Informatics":

Wiberg Mikael (Uppsala University, Sweden)

Chapter 13

Display Content Adaptation Using a Force Sensitive Office Chair

Riener Andreas (Johannes Kepler University Linz, Austria)

Chapter 14

On Dependability Issues in Ambient Intelligence Systems

Cinque Marcello (Università di Napoli Federico II, Italy)
Coronato Antonio (Institute of High Performance Computing and Networking (ICAR), Italy)
Testa Alessandro (Università di Napoli Federico II and Institute of High Performance Computing and Networking (ICAR), Italy)

Chapter 15

An Abstract User Interface Framework for Mobile and Wearable Devices

Ahlrichs Claas (Universitaet Bremen, Germany)
Lawo Michael (Universitaet Bremen, Germany)
Iben Hendrik (Universitaet Bremen, Germany)

Chapter 16

The Problems of Jurisdiction on the Internet

Lautman Róisín (University of Ulster, UK)
Curran Kevin (University of Ulster, UK)

Chapter 17

Game Theory:

Coffey Aodhan L. (National University of Ireland, Ireland)
Ward Tomas E. (National University of Ireland, Ireland)
Middleton Richard H. (National University of Ireland, Ireland)

Chapter 18

Enjoy.IT:

Navarro-Salvador M. Amparo (Universidad Politécnica de Valencia, Spain)
Sánchez-Calzón Ana Belén (Universidad Politécnica de Valencia, Spain)
Fernández-Llatas Carlos (Universidad Politécnica de Valencia, Spain)
Meneu Teresa (Universidad Politécnica de Valencia, Spain)

Chapter 19

DEAL:

Genitsaridi Irini (Institute of Computer Science, FORTH, Greece)
Bikakis Antonis (University College London, UK)
Antoniou Grigoris (Institute of Computer Science, FORTH, Greece)

Chapter 20

Ambient Assisted Living and Care in The Netherlands:

van Hoof J. (Fontys University of Applied Sciences, The Netherlands)
Wouters E. J. M. (Fontys University of Applied Sciences, The Netherlands)
Marston H. R. (University of Waterloo, Canada)
Vanrumste B. (MOBILAB and Katholieke Universiteit Leuven, Belgium)
Overdiep R. A. (Fontys University of Applied Sciences, The Netherlands)

Chapter 21

Towards a Mission-Critical Ambient Intelligent Fire Victims Assistance System

Feng Ling (Tsinghua University, China)
Li Yuanping (China National Software and Service Co. Ltd., China)
Qiao Lin (Shanghai Mobile Company, China)

Chapter 22

The Core Aspects of Search Engine Optimisation Necessary to Move up the Ranking

O'Neill Stephen (University of Ulster, UK)
Curran Kevin (University of Ulster, UK)

Order Your Copy Today!

Name: _____

Organization: _____

Address: _____

City, State, Zip: _____

Country: _____

Tel: _____

Fax: _____

E-mail: _____

☐ Enclosed is check payable to IGI Global in
US Dollars, drawn on a US-based bank

☐ Credit Card ☐ Mastercard ☐ Visa ☐ Am. Express

3 or 4 Digit Security Code: _____

Name on Card: _____

Account #: _____

Expiration Date: _____