The metaphor of Ambient Intelligence (AmI) tries to picture a vision of the future where all of us will be surrounded by “intelligent” electronic environments, and this ambient has claims to being sensitive and responsive to our needs. Ambient Intelligence without invasion of privacy represents a long-term vision for the EU Information Society Technologies Research programme. A strong multi-disciplinary and collaborative approach is a key requirement for large scale technology innovation and the development of effective applications. Up to now, most of the books and papers related to AmI, focus their analysis on the technology potential only. An important feature of this volume is the link between the technology - through the concepts of ubiquitous computing and intelligent interface - and the human experience of interacting in the world - through a neuro-psychological vision centered on the concept of “presence”. Presence, the sense of being there, is the experience of projecting one’s mind through media to other places, people and designed environments. The combination of recent discoveries in cognitive neuroscience - that make it possible to acquire a better understanding of the human aspects of presence, and the breakthroughs at the level of the enabling technologies make it increasingly possible to build novel systems based on this understanding. The goal of this volume is to assess the technologies and processes that are behind the AmI vision to help the development of state-of-the-art applications. More in detail, this volume aims at supporting researchers and scientists, interested in the understanding and exploiting the potential of AmI.
Contents:

Section I. An Introduction to Ambient Intelligence
- New Technologies for Ambient Intelligence/ M. Alcañiz and B. Rey
- The Psychology of Ambient Intelligence: Activity, Situation and Presence/ G. Riva
- Optimal Experience in Ambient Intelligence/ A. Gaggioli
- Ambient Intelligence: From Vision to Reality/ IST Advisory Group (ISTAG)

Section II. The Architecture of Ambient Intelligence: Towards Pervasive Computing and Context Awareness
- Context-Awareness for Physical Service Environments/ G. Cortese, M. Lunghi and F. Davide
- A Flexible Architecture for Ambient Intelligence Systems Supporting Adaptive Multimodal Interaction with Users/ S. Piva, C. Bonamico, C. Regazzoni and F. Lavagetto
- Computing in Tangible: Using Artifacts as Components of Ambient Intelligence Environments/ A. Kameas, I. Mavrommati and P. Markopoulos
- Game AI: The Possible Bridge between Ambient and Artificial Intelligence/ A. Kleiner

Section III. The Interface of Ambient Intelligence: Towards Natural User-System Interaction
- Interactive Context-Aware Systems Interacting with Ambient Intelligence/ A. Schmidt
- Bodyarchitecture: The Evolution of Interface towards Ambient Intelligence/ R. Cantoni

Section IV. Ambient Intelligence in Practice: Future Perspectives and Applications
- Challenges for Ambient Intelligence: Empowering the Users/ C. Bettiol and C. Campi
- AMI-Endowed Collaboration@work/ I. Laso Ballesteros and B. Salmelin
- The Role of Ambient Intelligence in the Social Integration of the Elderly/M. Cabrera Giráldez and C. Rodríguez Casal
- Ambient Intelligence for Rehabilitation/ F. Morganti and G. Riva

Order form:
If you would like to order one or more copies of the above, please fill in this order form and send it back to:
IOS Press, Promotion Department, Nieuwe Hemweg 6B, 1013 BG, Amsterdam, The Netherlands.

O I would like to order .... copies of Ambient Intelligence (US$126 / €105 / £74)

O Please bill me

O Please charge my credit card
O Amer. Express       O Euro/Master       O Visa
Exp. Date
Security code
Card no.

Name:
City/Zipcode:
Tel.:
Fax:
Date:
Signature:

Visit our website for more information or online ordering:
www.iospress.nl