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Titolo	Socio-technical Design of Ubiquitous Computing Systems // edited by Klaus David, Kurt Geihs, Jan Marco Leimeister, Alexander Roßnagel, Ludger Schmidt, Gerd Stumme, Arno Wacker
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Part I Introduction -- A Research Agenda for the Socio-Technical Design of Ubiquitous Computing Systems -- Part II Foundations -- Protecting Personality Rights and Legal Accountability -- Understanding the Formation of Trust -- User Model -- Enabling Active User Participation in Self-Adaptive Applications -- Matching and Mediation of Heterogeneous Context Information -- Mining Social Links for Ubiquitous Knowledge Engineering -- Collaborative Context Prediction -- Ranking Cryptographic Algorithms -- Part III Methods -- Socially Compatible Technology Design -- Requirement Patterns to Support Socio-technical System Design -- Designing Usable Adaptations -- SEMAT and VENUS — Different Perspectives? -- Part IV Applications -- Meet-U – Mobile Social Network -- Connect-U – A

System for Enhancing Social Networking -- Support-U – Designing an Ambient Assisted Living System using Interdisciplinary Development Patterns -- Part V Evaluation -- System Evaluation -- Simulation Study -- Part VI Conclusion & Outlook -- The Future of Socio-Technical Design for Ubiquitous Computing Systems.

Sommario/riassunto

By using various data inputs, ubiquitous computing systems detect their current usage context, automatically adapt their services to the user's situational needs and interact with other services or resources in their environment on an ad-hoc basis. Designing such self-adaptive, context-aware knowledge processing systems is, in itself, a formidable challenge. This book presents core findings from the VENUS project at the Interdisciplinary Research Center for Information System Design (ITeG) at Kassel University, where researchers from different fields, such as computer science, information systems, human-computer interaction and law, together seek to find general principles and guidelines for the design of socially aware ubiquitous computing systems. To this end, system usability, user trust in the technology and adherence to privacy laws and regulations were treated as particularly important criteria in the context of socio-technical system design. During the project, a comprehensive blueprint for systematic, interdisciplinary software development was developed, covering the particular functional and non-functional design aspects of ubiquitous computing at the interface between technology and human beings. The organization of the book reflects the structure of the VENUS work program. After an introductory part I, part II provides the groundwork for VENUS by presenting foundational results from all four disciplines involved. Subsequently, part III focuses on methodological research funneling the development activities into a common framework. Part IV then covers the design of the demonstrators that were built in order to develop and evaluate the VENUS method. Finally, part V is dedicated to the evaluation phase to assess the user acceptance of the new approach and applications. The presented findings are especially important for researchers in computer science, information systems, and human-computer interaction, but also for everyone working on the acceptance of new technologies in society in general.
