

1. Record Nr.	UNINA9910639899903321
Titolo	The Evolution of Pervasive Information Systems // edited by Manuele Kirsch Pinheiro, Carine Souveyet, Philippe Roose, Luiz Angelo Steffene
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	9783031181764 303118176X
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (195 pages)
Disciplina	943.005 004
Soggetti	Application software Computer networks Software engineering Internet of things Computer and Information Systems Applications Computer Communication Networks Software Engineering Internet of Things
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter. 1. What is a "Pervasive Information System" (PIS)? -- Chapter. 2. Design and Modeling in Pervasive Information Systems -- Chapter. 3. The context awareness challenges for PIS -- Chapter. 4. Middleware supporting PIS: Requirements, solutions, and challenges -- Chapter. 5. Edge Computing and Learning -- Chapter. 6. PIS: IoT & Industry 4.0 challenges -- Chapter. 7. PIS: Interoperability and Decision-Making Process -- A Review.
Sommario/riassunto	This book covers several aspects related the evolution of Information Systems into Pervasive Information Systems. New IT trends have an important impact on IT infrastructures, which become increasingly heterogeneous, flexible, and dynamic. These new trends are transforming Information Systems into what we call Pervasive Information Systems. The purpose of this book is to combine "state-of-

the-art” solutions from various research communities (such as Information Systems Engineering, Cloud Computing, Fog/Edge Computing, Pervasive systems, Distributed systems, and Middleware systems) related to the Pervasive Information Systems emergence as a common point of view. Through these multiple contributions, this book tackles important challenges concerning Information Systems evolution, promoting a holistic view of Pervasive Information System. Pervasive Information Systems (PIS) can be defined as a new class of Information Systems. It can be characterized by an IT that is gradually embedded in the physical environment and can accommodate the user's requirements and desires when necessary. This evolution implies considering Information Systems beyond the organization's physical environment to integrate new technologies transparently, leading to a pervasive environment whose behavior should be more and more reactive & proactive. It corresponds to an important change in Information Systems Engineering. Pervasive Information Systems are deeply multidisciplinary systems, demanding a holistic view in which multiple domains are invited to contribute.
