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Nota di contenuto	Intro -- Welcome Message from AINA-2021 Organizers -- AINA-2021 Organizing Committee -- General Co-chairs -- Program Committee Co-chairs -- Workshops Co-chairs -- International Journals Special Issues Co-chairs -- Award Co-chairs -- Publicity Co-chairs -- International Liaison Co-chairs -- Local Arrangement Co-chairs -- Finance Chair -- Web Co-chairs -- Steering Committee Chairs -- Tracks and Program Committee Members -- 1. Network Protocols and Applications -- Sec300 -- Sec301 -- 2. Next Generation Wireless Networks -- Sec303 -- Sec304 -- 3. Multimedia Systems and Applications -- Sec305 -- Sec306 -- 4. Pervasive and Ubiquitous Computing -- Sec105 -- Sec106 -- 5. Web-Based and E-Learning Systems -- Sec331 -- Sec312 -- 6. Distributed and Parallel Computing -- Sec256 -- Sec251 -- 7. Data Mining, Big Data Analytics and Social Networks -- Sec261 -- Sec389 -- 8. Internet of Things and Cyber-Physical Systems -- Sec265 -- Sec266 -- 9. Intelligent Computing and

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## 1 Introduction.

### Sommario/riassunto

This book covers the theory, design and applications of computer networks, distributed computing and information systems. Networks of today are going through a rapid evolution, and there are many emerging areas of information networking and their applications. Heterogeneous networking supported by recent technological advances in low-power wireless communications along with silicon integration of various functionalities such as sensing, communications, intelligence and actuations is emerging as a critically important disruptive computer class based on a new platform, networking structure and interface that enable novel, low-cost and high-volume applications. Several of such applications have been difficult to realize because of many interconnections problems. To fulfill their large range of applications, different kinds of networks need to collaborate, and wired and next-generation wireless systems should be integrated in order to develop high-performance computing solutions to problems arising from the complexities of these networks. The aim of the book "Advanced Information Networking and Applications" is to provide latest research findings, innovative research results, methods and development techniques from both theoretical and practical perspectives related to the emerging areas of information networking and applications.