

1. Record Nr.	UNINA9910999678903321
Titolo	Applied Innovations in Information and Communication Technology : Advanced Techniques and Modern Trends in Information and Communication Technology // edited by Stanislav Dovgyi, Eduard Siemens, Larysa Globa, Oleh Kopiika, Oleksandr Stryzhak
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	3-031-89296-8
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (XXV, 758 p. 328 illus., 255 illus. in color.)
Collana	Lecture Notes in Networks and Systems, , 2367-3389 ; ; 1338
Disciplina	621.382
Soggetti	Telecommunication Automatic control Robotics Automation Computational intelligence Communications Engineering, Networks Control, Robotics, Automation Computational Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	-- Part I Communication and Data Transport Technologies -- 1 The Method of Multi-Vector Routing in Mobile IoT Networks Under the Influence of Strong Interference -- 2 Simulation Modeling Algorithm of Low-Bandwidth Radio Network of Automated Control Systems -- 3 Use of Heterogeneous Special Purpose Telecommunication Networks for Provision of Convergent Services -- 4 Methodology for Choosing the Best Network Topology for the Multiple Objects Network, etc.
Sommario/riassunto	This book highlights the most important research areas in Information and Communication Technologies and their impact on digital society and environment sustainable development namely the research in fields of information and communication technologies, artificial intelligence in ICT, data analytics, security of data and services, reducing energy consumption in the digital environment, and mathematical modeling for practical and research tasks in communication and data processing

fields provided by various groups of researchers from Germany and Ukraine in cooperation with scientists from different countries. The presented studies contain a discussion on the use of artificial intelligence, in particular, methods of deep learning, practical implementation of the Internet of Things (IoT), the modern study of ECO monitoring systems; research in fields of mathematical modeling in applied problems. The book focuses on the basics of information and analytical activities in the digital global space, to providing broadband Internet access without decreasing the quality of experience (QoE) level, improving services providing, and system architecture for SDN. The study of modern communication and information technologies contains original works dealing with many aspects of their improvement and use for forecasting social and environment sustainable development based on global information space, as well as research that contains actual papers, which show some effective technological solutions that can be used for the implementation of novel cloud infrastructure and radio electronics systems. These results can be used in the implementation of novel systems and to promote the exchange of information in e-societies. Given its scope the book offers a valuable resource for scientists, lecturers, specialists working at enterprises, graduate and undergraduate students who engage with problems in Information and Communication Technologies as well as aspects of society and environment sustainable development.

---