Record Nr. UNISA996418307003316 **Titolo** Internet of things, smart spaces, and next generation networks and systems. Part 1: 20th international conference, NEW2AN 2020, and 13th conference, ruSMART 2020, St. Petersburg, Russia, August 26-28, 2020 : proceedings / / Olga Galinina, Sergey Andreev, Sergey Balandin, Yevgeni Koucheryavy, editors Cham, Switzerland:,: Springer,, [2020] Pubbl/distr/stampa ©2020 **ISBN** 3-030-65726-4 Edizione [1st edition 2020.] 1 online resource (XVI, 451 pages): 99 illustrations Descrizione fisica Computer Communication Networks and Telecommunications; ; 12525 Collana 004 Disciplina Soggetti Internet of things Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references. Nota di bibliografia New Generation of Smart Services -- Identification of Abnormal Nota di contenuto

Functioning of Devices of Cyber-physical Systems -- Energy-Aware Algorithm for LoRa Technology: Prototype Implementation -- Methods for reducing the Amount of Data transmitted and stored in IoT Systems -- Analysis of IDS Alert Correlation Techniques for Attacker Group Recognition in Distributed Systems -- Explaining Android Application Authorship Attribution Based on Source Code Analysis -- Next Generation Wired/Wireless Advanced Networks and Systems -- The Method of Forming the Digital Clusters for Fifth and Beyond Telecommunication Networks Structure based on the Quality of Service -- Analyzing the Effectiveness of Dynamic Network Slicing Procedure in 5G Network by Queuing and Simulation Models -- Space Division Multiple Access Performance Evaluation in Ultra-Dense 5G Networks --Analysis of the Response Time Characteristics of the Fog Computing Enabled Real-Time Mobile Applications -- Efficiency of Collecting Radiated RF Energy for Modern Wireless Technologies within the Limits of Russian Legislation -- Information Security State Analysis of Elements of Industry 4.0 Devices in Information Systems -- The State Identification of Industry 4.0 Mechatronic Elements Based on Behavioral Patterns -- Data Mining Algorithms Parallelization in the Framework of

Agent-Oriented programming -- The IoT and Big Data in the Logistics Development. Crude Oil Transportation -- Availability of Emergency Power Supply for Voice Communications of Air Traffic Control System -- BotSpot: Deep Learning Classification of Bot Accounts within Twitter -- Standardization of Road Quality Assessment by Developing Mobile Applications -- Service-Oriented Technology Architecture for Value-Based and Personalized Medicine -- SoMIAP: Social Media Images Analysis and Prediction Framework -- Modeling and Investigation of the Movement of the User of Augmented Reality Service -- Audio Interval Retrieval using Convolutional Neural Networks -- Modeling the NB-IoT Transmission Process with Intermittent Network Availability --Evaluation of Routing Protocols for Multi-hop Communication in LPWAN -- Deep Learning with Long Short-Term Memory for IoT Traffic Prediction -- VANET Traffic Prediction using LSTM with Deep Neural Network Learning -- Modelling Medical Devices with Honeypots --High Density Internet of Things Network Analysis -- Dynamic Programming Method for Traffic Distribution in LoRaWAN Network --Study of the Accuracy of Determining the Location of Radio Emission Sources with Complex Signals when using Autocorrelation and Matrix Receivers in Broadband Tools for Analyzing the Electronic Environment -- Electromagnetic Compatibility Research of Non-standard LTE-1800 TDD Base Stations for Railway Applications and Base Stations LTE-1800 FDD -- Elimination of Carrier Frequency Offset of Local Oscillator to Improve Accuracy of GNSS Positioning -- Modified Direct Positioning Method in Satellite Geolocation -- Offset Generation and Interlayer Network Architecture for 5GNR LDPC Parallel Layered Decoder with Variable Lifting Factor Support -- Bitstreams multiplex with Trellis-Coded Modulation and the Fixed Point LDPC Decoding Procedure for Centralised Wireless Networks -- About Burst Decoding for Block-Permutation LDPC Codes -- Estimation of the Possibility of PAPR Reduction for Optimal Signals -- Study of Detection Characteristics in Recognition of Simple Radio Pulses and Signals with LFM and PSK in the Autocorrelation Receiver -- Wideband Tunable Delay Line for Microwave Signals Based on Radiophotonic Components -- BER Performance of SEFDM Signals in LTE Fading Channels with Imperfect Channel Knowledge -- Sensitivity of Energy Spectrum Shape and BER to Variation of Parameters Used in Constraint on Correlation Coefficient during FTN Pulse Optimization.

Sommario/riassunto

This book constitutes the joint refereed proceedings of the 20th International Conference on Next Generation Teletraffic and Wired/Wireless Advanced Networks and Systems, NEW2AN 2020, and the 13th Conference on Internet of Things and Smart Spaces, ruSMART 2020. The conference was held virtually due to the COVID-19 pandemic. The 79 revised full papers presented were carefully reviewed and selected from 225 submissions. The papers of NEW2AN address various aspects of next-generation data networks, with special attention to advanced wireless networking and applications. In particular, they deal with novel and innovative approaches to performance and efficiency analysis of 5G and beyond systems. employed game-theoretical formulations, advanced queuing theory. and stochastic geometry, while also covering the Internet of Things, cyber security, optics, signal processing, as well as business aspects. ruSMART 2020, provides a forum for academic and industrial researchers to discuss new ideas and trends in the emerging areas.