1. Record Nr. UNISA996464407903316

Titolo	Computational Science – ICCS 2021 [[electronic resource]] : 21st International Conference, Krakow, Poland, June 16–18, 2021, Proceedings, Part IV / / edited by Maciej Paszynski, Dieter Kranzlmüller, Valeria V. Krzhizhanovskaya, Jack J. Dongarra, Peter M.A. Sloot
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2021
ISBN	3-030-77970-X
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (XIX, 656 p. 301 illus., 211 illus. in color.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 12745
Disciplina	004
Soggetti	Computer science Artificial intelligence Computer engineering Computer networks Computer science - Mathematics Theory of Computation Artificial Intelligence Computer Engineering and Networks Mathematics of Computing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes author index.
Nota di contenuto	Computational Methods for Emerging Problems in (dis-)Information Analysis -- The Methods and Approaches of Explainable Artificial Intelligence -- Fake or real? The novel approach to detect online disinformation based on multi ML classifiers -- Transformer Based Models in Fake News Detection -- Towards Model-Agnostic Ensemble Explanations -- Computational Methods in Smart Agriculture -- Bluetooth Low Energy Livestock Positioning for Smart Farming Applications -- Monitoring the Uniformity of Fish Feeding Based on Image Feature Analysis -- A new multi-objective approach to optimize irrigation using a crop simulation model and weather history -- Computational Optimization, Modelling and Simulation -- Expedited

Trust-Region-Based Design Closure of Antennas by Variable-Resolution EM Simulations -- Optimum Design of Tuned Mass Dampers for Adjacent Structures via Flower Pollination Algorithm -- On Fast Multi-Objective Optimization of Antenna Structures Using Pareto Front Triangulation and Inverse Surrogates -- Optimizations of a Generic Holographic Projection Model for GPU's -- Similarity and Conformity Graphs in Lighting Optimization and Assessment -- Pruned simulation-based optimal sailboat path search using micro HPC systems -- Two stage approach to optimize electricity contract capacity problem for commercial customers -- Improved Design Closure of Compact Microwave Circuits by Means of Performance Requirement Adaptation -- Graph-grammar based longest-edge refinement algorithm for three-dimensional optimally p refined meshes with tetrahedral elements -- Elitism in Multiobjective Hierarchical Strategy -- Modelling and forecasting based on recurrent pseudoinverse matrices -- Semi-analytical Monte Carlo optimisation method applied to the inverse Poisson problem -- Modeling the contribution of agriculture towards soil nitrogen surplus in Iowa -- An Attempt to Replace System Dynamics with Discrete Rate Modeling in Demographic Simulations -- New On-Line Algorithms for Modelling, Identification and Simulation of Dynamic Systems Using Modulating Functions and Non-Asymptotic State Estimators: Case Study for a Chosen Physical Process -- Iterative global sensitivity analysis algorithm with neural network surrogate modeling -- Forecasting Electricity Prices: Autoregressive Hybrid Nearest Neighbors (ARHNN) method -- Data-Driven Methods for Weather Forecast -- Generic Case of Leap-Frog Algorithm for Optimal Knots Selection in Fitting Reduced Data -- Intelligent Planning of Logistic Networks to Counteract Uncertainty Propagation -- Modeling traffic forecasts with probability in DWDM optical networks -- Endogenous factors aecting the cost of large-scale geo-stationary satellite systems -- Description of electricity consumption by using leading hours intra-day model -- The problem of tasks scheduling with due dates in a flexible multi-machine production cell -- Discovering the influence of interruptions in cycling training: A data science study -- Analysis of complex partial seizure using non-linear duffing Van der Pol oscillator model -- Computational Science in IoT and Smart Systems -- A Review on Visual Programming for Distributed Computation in IoT -- Data preprocessing, aggregation and clustering for agile manufacturing based on Automated Guided Vehicles -- Comparison of Speech Recognition and Natural Language Understanding Frameworks for Detection of Dangers with Smart Wearables -- A Decision Support System Based on Augmented Reality for the Safe Preparation of Chemotherapy Drugs -- Metagenomic analysis at the edge with Jetson Xavier NX -- Programming IoT-spaces: A User-Survey on Home Automation Rules -- Application of the Ant Colony algorithm for routing in next generation programmable networks -- Scalable Computing System with Two-Level Reconfiguration of Multi-Channel Inter-Node communication -- Real-time Object Detection for Smart Connected Worker in 3D printing -- Object-Oriented Internet - Cloud Interoperability -- Static and Dynamic Comparison of Pozyx and DecaWave UWB Indoor Localization Systems with Possible Improvements -- Challenges associated with sensors and data fusion for AGV-driven smart manufacturing -- Dynamic pricing and discounts by means of interactive presentation systems in stationary point of sales -- Profile-driven synthetic trajectories generation to enhance smart systems solutions -- Augmenting automatic clustering with expert knowledge and explanations -- Renewable energy-aware heuristic algorithms for edge server selection for stream data

processing -- Dataset for anomalies detection in 3D printing.

Sommario/riassunto

The six-volume set LNCS 12742, 12743, 12744, 12745, 12746, and 12747 constitutes the proceedings of the 21st International Conference on Computational Science, ICCS 2021, held in Krakow, Poland, in June 2021.* The total of 260 full papers and 57 short papers presented in this book set were carefully reviewed and selected from 635 submissions. 48 full and 14 short papers were accepted to the main track from 156 submissions; 212 full and 43 short papers were accepted to the workshops/ thematic tracks from 479 submissions. The papers were organized in topical sections named: Part I: ICCS Main Track Part II: Advances in High-Performance Computational Earth Sciences: Applications and Frameworks; Applications of Computational Methods in Artificial Intelligence and Machine Learning; Artificial Intelligence and High-Performance Computing for Advanced Simulations; Biomedical and Bioinformatics Challenges for Computer Science Part III: Classifier Learning from Difficult Data; Computational Analysis of Complex Social Systems; Computational Collective Intelligence; Computational Health Part IV: Computational Methods for Emerging Problems in (dis-)Information Analysis; Computational Methods in Smart Agriculture; Computational Optimization, Modelling and Simulation; Computational Science in IoT and Smart Systems Part V: Computer Graphics, Image Processing and Artificial Intelligence; Data-Driven Computational Sciences; Machine Learning and Data Assimilation for Dynamical Systems; MeshFree Methods and Radial Basis Functions in Computational Sciences; Multiscale Modelling and Simulation Part VI: Quantum Computing Workshop; Simulations of Flow and Transport: Modeling, Algorithms and Computation; Smart Systems: Bringing Together Computer Vision, Sensor Networks and Machine Learning; Software Engineering for Computational Science; Solving Problems with Uncertainty; Teaching Computational Science; Uncertainty Quantification for Computational Models *The conference was held virtually. Chapter “Intelligent Planning of Logistic Networks to Counteract Uncertainty Propagation” is available open access under a Creative Commons Attribution 4.0 International License via link. springer.com. The six-volume set LNCS 12742, 12743, 12744, 12745, 12746, and 12747 constitutes the proceedings of the 21st International Conference on Computational Science, ICCS 2021, held in Krakow, Poland, in June 2021.* The total of 260 full papers and 57 short papers presented in this book set were carefully reviewed and selected from 635 submissions. 48 full and 14 short papers were accepted to the main track from 156 submissions; 212 full and 43 short papers were accepted to the workshops/ thematic tracks from 479 submissions. The papers were organized in topical sections named: Part I: ICCS Main Track Part II: Advances in High-Performance Computational Earth Sciences: Applications and Frameworks; Applications of Computational Methods in Artificial Intelligence and Machine Learning; Artificial Intelligence and High-Performance Computing for Advanced Simulations; Biomedical and Bioinformatics Challenges for Computer Science Part III: Classifier Learning from Difficult Data; Computational Analysis of Complex Social Systems; Computational Collective Intelligence; Computational Health Part IV: Computational Methods for Emerging Problems in (dis-)Information Analysis; Computational Methods in Smart Agriculture; Computational Optimization, Modelling and Simulation; Computational Science in IoT and Smart Systems Part V: Computer Graphics, Image Processing and Artificial Intelligence; Data-Driven Computational Sciences; Machine Learning and Data Assimilation for Dynamical Systems; MeshFree Methods and Radial Basis Functions in Computational Sciences; Multiscale Modelling and

Simulation Part VI: Quantum Computing Workshop; Simulations of Flow and Transport: Modeling, Algorithms and Computation; Smart Systems: Bringing Together Computer Vision, Sensor Networks and Machine Learning; Software Engineering for Computational Science; Solving Problems with Uncertainty; Teaching Computational Science; Uncertainty Quantification for Computational Models *The conference was held virtually. Chapter “Intelligent Planning of Logistic Networks to Counteract Uncertainty Propagation” is available open access under a Creative Commons Attribution 4.0 International License via link. springer.com. Chapter: Modelling and Forecasting Based on Recurrent Pseudoinverse Matrices” is available open access under a Creative Commons Attribution 4.0 International License via link.springer.com.