

1. Record Nr.	UNISA996466327203316
Titolo	Computational Science – ICCS 2019 [[electronic resource]] : 19th International Conference, Faro, Portugal, June 12–14, 2019, Proceedings, Part V // edited by João M. F. Rodrigues, Pedro J. S. Cardoso, Jânio Monteiro, Roberto Lam, Valeria V. Krzhizhanovskaya, Michael H. Lees, Jack J. Dongarra, Peter M.A. Sloot
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-22750-2
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XXII, 812 p. 458 illus., 279 illus. in color.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 11540
Disciplina	004
Soggetti	Computer science Artificial intelligence Computer engineering Computer networks Logic design Computer vision Computer science—Mathematics Theory of Computation Artificial Intelligence Computer Engineering and Networks Logic Design Computer Vision Mathematics of Computing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Track of Smart Systems: Computer Vision, Sensor Networks and Machine Learning -- Effective Self Attention Modeling for Aspect Based Sentiment Analysis -- Vision and crowdsensing technology for an optimal response in physical-security -- New Intelligent Tools to Adapt NL-interface to Corporate Environments -- Asymmetric Deep Cross-

modal Hashing -- Applying NSGA-II to a Multiple Objective Dial a Ride Problem -- Smart Campus Parking – Parking Made Easy -- The network topology of connecting Things: Defence of IoT graph in the smart city -- SILKNOWViz: Spatio-temporal data ontology viewer -- Ontology-Driven Automation of IoT-Based Human-Machine Interfaces Development -- Towards Parameter-Optimized Vessel Re-identification based on IORnet -- Towards Low-Cost Indoor Localisation Using a Multi-camera System -- A New Shape Descriptor and Segmentation Algorithm for Automated Classifying of Multiple-Morphological Filamentous Algae -- Application of hierarchical clustering for object tracking with a Dynamic Vision Sensor -- Binarization of Degraded Document Images with Generalized Gaussian Distribution -- Nonlinear dimensionality reduction in texture classification: is manifold learning better than PCA? -- Event-Oriented Keyphrase Extraction Based on Bi-Clustering Model -- Track of Solving Problems with Uncertainties -- Path-Finding with a Full-Vectorized GPU Implementation of Evolutionary Algorithms in an Online Crowd Model Simulation Framework -- Analysing the trade-off between computational performance and representation richness in ontology-based systems -- A Framework for Distributed Approximation of Moments with Higher-Order Derivatives through Automatic Differentiation -- IPIES for Uncertainly Dened Shape of Boundary, Boundary Conditions and Other Parameters in Elasticity Problems -- Enabling UQ for complex modelling workflows -- Ternary-Decimal Exclusion Algorithm for Multiattribute Utility Functions -- Sums of Key Functions Generating a Cryptosystem -- Consistent Conjectures in Globalization Problems -- Verification on the Ensemble of Independent Numerical Solutions -- On the estimation of the accuracy of numerical solutions in CFD problems -- "Why did you do that?" Explaining black box models with Inductive Synthesis -- Predictive Analytics with Factor Variance Association -- Track of Teaching Computational Science -- Redesigning Interactive Educational Modules for Combinatorial Scientific Computing -- A Learner-Centered Approach to Teaching Computational Modeling, Data Analysis, and Programming -- Enabling Interdisciplinary Instruction in Computer Science and Humanities: An Innovative Teaching and Learning Model Customized for Small Liberal Arts Colleges -- A project-based course on software development for (engineering) research -- Programming paradigms for computational science: three fundamental Models -- Numerical Analysis project in ODEs for undergraduate students -- Poster Track ICCS 2019 -- Mixed Finite Element Solution for the Natural-Gas Dual-Mechanism Model -- On the Feasibility of Distributed Process Mining in Healthcare -- How to Plan Roadworks in Urban Regions? A Principled Approach Based on AI Planning -- Big data approach to fluid dynamics visualization problem -- Dolphin Kick Swimmer using the Unstructured Moving Mesh Method -- The performance prediction and improvement of SPH with the interaction-list-sharing method on PEZY-SCs -- Influence of architectural features of the SNC-4 mode of the Intel Xeon Phi KNL on matrix multiplication -- Improving Planning Performance in PDDL+ Domains via Automated Predicate Reformulation -- The Case of iOS vs. Android: Applying System Dynamics to Digital Business Platforms -- Sockpuppet Detection in Social Network via Propagation Tree -- Exploring the performance of fine-grained synchronization and data exchange across process boundaries on modern multi-core architectures -- Accelerating Wild Fire Simulator using GPU -- Augmented Reality for Real-time Navigation Assistance to Wheelchair Users with Obstacles' Management -- p3Enum: A new Parameterizable and Shared-Memory Parallelized Shortest Vector Problem Solver --

Rendering Non-Euclidean Space in Real-Time Using Spherical and Hyperbolic Trigonometry -- Improving Academic Homepage Identification from the Web using Neural Networks -- Combining Fuzzy Logic and CEP Technology to Improve Air Quality in Cities -- Parallel parametric linear programming solving, and application to polyhedral computations -- Automating the Generation of Comparison Weights for Enhancing the AHP Decision-Making Process -- Parallel algorithm based on Singular Value Decomposition for high performance training of Neural Networks -- In-Situ Visualization with Membrane Layer for Movie-based Visualization -- Genetic Algorithm based EV Scheduling for On-Demand Public Transit System -- Short-term irradiance forecasting on the basis of spatially distributed Measurements -- Multi-GPU Acceleration of the iPIC3D Implicit Particle-in-Cell Code -- Reducing Symbol Search Overhead on Stream-based Data Compression -- Stabilized variational formulation for solving cells response to applied electric field -- Data-driven partial derivative equations discovery with evolutionary Approach -- Predicting Cervical Cancer with Metaheuristic optimizers for training LSTM -- Top k 2-Clubs in a Network: A Genetic Algorithm -- CA-RPT: Context-Aware Road Passage Time Estimation for Urban Trac -- Modelling and Analysis of Complex Patient-Treatment Process using GraphMiner Toolbox -- Combining Algorithmic Rethinking and AVX-512 Intrinsics for Efficient Simulation of Subcellular Calcium Signaling -- Ocean Circulation Hindcast at the Brazilian Equatorial Margin -- A matrix-free eigenvalue solver for the multigroup neutron diffusion Equation -- Path-dependent interest rate option pricing with jumps and stochastic Intensities -- Composite data types in dynamic dataflow languages as copyless memory sharing mechanism -- A coupled food security and refugee movement model for the South Sudan conflict -- A Proposal to Model Ancient Silk Weaving Techniques and Extracting Information from Digital Imagery - Ongoing Results of the SILKNOW Project -- A Comparison of Selected Variable Ordering Methods for NFA Induction -- Traffic3D: A Rich 3D-Traffic Environment to Train Intelligent Agents -- Energy Efficiency Evaluation of Distributed Systems -- Support for high-level quantum Bayesian inference -- Financial Time Series Motif Discovery and Analysis Using VALMOD -- Profiling of Household Residents' Electricity Consumption Behavior using Clustering Analysis -- DNAS-STriDE Framework for Human Behavior Modelling in Dynamic Environments -- OPENCoastS: An open-access app for sharing coastal prediction information for management and recreational use.

Sommario/riassunto

The five-volume set LNCS 11536, 11537, 11538, 11539, and 11540 constitutes the proceedings of the 19th International Conference on Computational Science, ICCS 2019, held in Faro, Portugal, in June 2019. The total of 65 full papers and 168 workshop papers presented in this book set were carefully reviewed and selected from 573 submissions (228 submissions to the main track and 345 submissions to the workshops). The papers were organized in topical sections named: Part I: ICCS Main Track Part II: ICCS Main Track; Track of Advances in High-Performance Computational Earth Sciences: Applications and Frameworks; Track of Agent-Based Simulations, Adaptive Algorithms and Solvers; Track of Applications of Matrix Methods in Artificial Intelligence and Machine Learning; Track of Architecture, Languages, Compilation and Hardware Support for Emerging and Heterogeneous Systems Part III: Track of Biomedical and Bioinformatics Challenges for Computer Science; Track of Classifier Learning from Difficult Data; Track of Computational Finance and Business Intelligence; Track of Computational Optimization, Modelling and Simulation; Track of Computational Science in IoT and Smart Systems Part IV: Track of Data-

Driven Computational Sciences; Track of Machine Learning and Data Assimilation for Dynamical Systems; Track of Marine Computing in the Interconnected World for the Benefit of the Society; Track of Multiscale Modelling and Simulation; Track of Simulations of Flow and Transport: Modeling, Algorithms and Computation Part V: Track of Smart Systems: Computer Vision, Sensor Networks and Machine Learning; Track of Solving Problems with Uncertainties; Track of Teaching Computational Science; Poster Track ICCS 2019 Chapter “Comparing Domain-decomposition Methods for the Parallelization of Distributed Land Surface Models” is available open access under a Creative Commons Attribution 4.0 International License via link.springer.com.
