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Soggetti	Computer science Computer engineering Computer networks Artificial intelligence Data protection Social sciences—Data processing Logic design Theory of Computation Computer Engineering and Networks Artificial Intelligence Data and Information Security Computer Application in Social and Behavioral Sciences Logic Design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Track of Simulations of Flow and Transport: Modeling, Algorithms and Computation Simulations of Flow and Transport: Modeling, Algorithms and Computation -- ALE Method for a Rotating Structure Immersed in the Fluid and Its Application to the Artificial Heart Pump in Hemodynamics -- Free Surface Flow Simulation of Fish Turning Motion -- Circular Function-Based Gas-kinetic Scheme for Simulation of

Viscous Compressible Flows -- A new edge stabilization method for the convection-dominated diffusion-convection equations -- Symmetric Sweeping Algorithms for Intersections of Two Quadrilateral Mesh -- A Two-field Finite Element Solver for Poroelasticity on Quadrilateral Meshes -- Preprocessing parallelization for the ALT-algorithm -- Efficient Linearly and Unconditionally Energy Stable Schemes for the Phase Field Model of Solid-State Dewetting Problems -- A novel energy stable numerical scheme for Navier-Stokes-Cahn-Hilliard two-phase flow model with variable densities and viscosities -- Study on Numerical Methods for Gas Flow Simulation Using Double-Porosity Double-Permeability Model -- Molecular Simulation of Displacement of Methane by Injection Gases in Shale -- A Compact and Efficient Lattice Boltzmann Scheme to Simulate Complex Thermal Fluid Flows -- Study on topology-based identification of sources of vulnerability for natural gas pipeline networks -- LES study on high Reynolds turbulent drag-reducing flow of viscoelastic fluids based on multiple relaxation times constitutive model and mixed subgrid-scale model -- Track of Solving Problems with Uncertainties Statistical and Multivariate Analysis Applied to a Database of Patients with Type-2 Diabetes -- Novel Monte Carlo Algorithm for Solving Singular Linear Systems -- Reducing Data Uncertainty in Forest Fire Spread Prediction: a Matter of Error Function Assessment -- Analysis of the accuracy of OpenFOAM solvers for the problem of supersonic flow around a cone -- Modification Of Interval Arithmetic For Modelling And Solving Uncertainly Defined Problems By Interval Parametric Integral Equations System -- A Hybrid Heuristic for the Probabilistic Capacitated Vehicle Routing Problem with Two-Dimensional Loading Constraints -- A human-inspired model to represent uncertain knowledge in the Semantic Web -- Bayesian based approach learning for outcome prediction of soccer matches -- Fuzzy and Data-Driven Urban Crowds -- Track of Teaching Computational Science Design and Analysis of an Undergraduate Computational Engineering Degree at Federal University of Juiz de Fora -- Extended Cognition Hypothesis View on Computational Thinking in Computer Science Education -- Interconnected Enterprise Systems - A Call for New Teaching Approaches -- Poster Papers -- Efficient Characterization of Hidden Processor Memory Hierarchies -- Discriminating Postural Control Behaviors from Posturography with Statistical Tests and Machine Learning Models: Does Time Series Length Matter -- Mathematical Modelling of Wormhole-routed x-Folded TM Topology in the Presence of Uniform Traffic -- Adaptive Time-Splitting Scheme for Nanoparticles Transport with Two-phase Flow in Heterogeneous Porous Media -- Identifying Central Individuals in Organised Criminal Groups and Underground Marketplaces -- Guiding the optimization of parallel codes on multicores using an analytical cache model -- LDA-Based Scoring of Sequences Generated by RNN for Automatic Tanka Composition -- Computing Simulation of Interactions between + ProteinandJanusNanoparticle -- A modified bandwidth reduction heuristic based on the WBRA and George-Liu algorithm -- Improving Large-scale Fingerprint-based Queries in Distributed Infrastructure -- A Effective Truth Discovery Algorithm with Multi-Source Sparse Data -- Blackboard Meets Dijkstra for Resource Allocation Optimization -- Augmented Self-paced Learning with Generative Adversarial Networks -- Benchmarking Parallel Chess Search in Stockfish on Intel Xeon and Intel Xeon Phi Processors -- Leveraging Uncertainty Analysis of Data to Evaluate User Influence Algorithms of Social Networks -- E-Zone: A faster Neighbor Point Query Algorithm For Matching Spacial Objects -- Application of Algorithmic Differentiation for Exact Jacobians to the

Universal Laminar Flame Solver -- Morph Resolution Based on Autoencoders Combined with Effective Context Information -- Old Habits Die Hard: Fingerprinting Websites On The Cloud -- Deep Streaming Graph Representations -- Adversarial Reinforcement Learning for Chinese Text Summarization -- Column Concept Determination for Chinese Web Tables via Convolutional Neural Network -- Service-oriented approach for Internet of Things -- Adversarial Framework for General Image Inpainting -- A Stochastic Model to Simulate the Spread of Leprosy in Juiz de Fora -- Data Fault Identification and Repair Method of Traffic Detector -- The valuation of CCIRS with a new design -- Method of Node Importance Measurement in Urban Road Network -- AdaBoost-LSTM Ensemble Learning for Financial Time Series Forecasting -- Analysis of Bluetooth Low Energy Detection Range Improvements for the Healthcare Environment -- Study on an N-parallel FENE-P constitutive model based on multiple relaxation times for viscoelastic fluid -- RADIC based Fault Tolerance System with Dynamic Resource Controller -- Effective Learning with Joint Discriminative and Representative Feature Selection -- Agile tuning method in successive steps for a river flow simulator -- A Parallel Quicksort Algorithm on Manycore Processors in Sunway TaihuLight -- How is the Forged Certificates in the Wild: Practice on Large-scale SSL Usage Measurement and Analysis -- Managing Cloud Data Centers with Three-state Server Model under Job Abandonment Phenomenon -- The Analysis of the Effectiveness of the Perspective-based Observational Tunnels Method by the Example of the Evaluation of Possibilities to Divide the Multidimensional Space of Coal Samples -- Urban data and spatial segregation: analysis of food services clusters in St. Petersburg, Russia -- Control driven lighting design for large-scale installations -- An OpenMP implementation of the TVD-Hopmoc method based on a synchronization mechanism using locks between adjacent threads on Xeon Phi accelerators -- Data-Aware Scheduling of Scientific Workflows in Hybrid Clouds -- Large margin proximal non-parallel support vector classifiers -- The multi-core optimization of the unbalanced calculation in the clean numerical simulation of Rayleigh-Benard turbulence -- ES-GP: An Effective Evolutionary Regression Framework with Gaussian Process and Adaptive Segmentation Strategy -- Evaluating Dynamic Scheduling of Tasks in Mobile Architectures using ParallelME Framework -- An OAuth2.0-Based Unified Authentication System for Secure Services in the Smart Campus Environment -- Time Series Cluster analysis on electricity consumption of North Hebei Province in China -- Effective Semi-supervised Learning Based on Local Correlation -- Detection and Prediction of House Price Bubbles: Evidence from a New City -- A Novel Parsing-based Automatic Domain Terminology Extraction Method -- Remote Procedure Calls for Improved Data Locality with the Epiphany Architecture -- Identifying the propagation sources of stealth worms -- Machine Learning Based Text Mining in Electronic Health Records: Cardiovascular Patient Cases -- Evolutionary ensemble approach for behavioral credit scoring -- Detecting influential users in customer-oriented online communities -- GeoSkelSL: A Python High-Level DSL for Parallel Computing in Geosciences -- Precedent-based approach for the identification of deviant behavior in social media -- Performance Analysis of 2D-compatible 2.5D-PDGEMM on Knights Landing Cluster.

Sommario/riassunto

The three-volume set LNCS 10860, 10861 and 10862 constitutes the proceedings of the 18th International Conference on Computational Science, ICCS 2018, held in Wuxi, China, in June 2018. The total of 155 full and 66 short papers presented in this book set was carefully reviewed and selected from 404 submissions. The papers were

organized in topical sections named: Part I: ICCS Main Track Part II: 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 ManYcore Systems; Track of Biomedical and Bioinformatics Challenges for Computer Science; Track of Computational Finance and Business Intelligence; Track of Computational Optimization, Modelling and Simulation; Track of Data, Modeling, and Computation in IoT and Smart Systems; Track of Data-Driven Computational Sciences; Track of Mathematical-Methods-and-Algorithms for Extreme Scale; Track of Multiscale Modelling and Simulation Part III: Track of Simulations of Flow and Transport: Modeling, Algorithms and Computation; Track of Solving Problems with Uncertainties; Track of Teaching Computational Science; Poster Papers.
