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Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 10861
Disciplina	004
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
Note generali	Includes index.
Nota di contenuto	Track of Advances in High-Performance Computational Earth -- Sciences: Applications and Frameworks Development of scalable three-dimensional elasto-plastic nonlinear wave propagation analysis method for earthquake damage estimation of soft grounds -- A New Matrix-free Approach for Large-scale Geodynamic Simulations and its

Performance -- Viscoelastic Crustal Deformation Computation Method with Reduced Random Memory Accesses for GPU-based Computers -- An Event Detection Framework for Virtual Observation System: Anomaly Identification for An Acme Land Simulation -- Enabling Adaptive Mesh Refinement for Single Components of ECHAM6 -- Efficient and accurate evaluation of Bezier tensor product surfaces -- Track of Agent-based simulations, adaptive algorithms and solvers Agent-Based Simulations, Adaptive Algorithms and Solvers -- Hybrid Swarm and Agent-based Evolutionary Optimization -- Data-driven Agent-based Simulation for Pedestrian Capacity Analysis -- A Novel Agent-based Modeling Approach for Image Coding and Lossless Compression Based on the Wolf-Sheep Predation Model -- Planning Optimal Path Networks Using Dynamic Behavioral Modeling -- Multiagent context–dependent model of opinion dynamics in a virtual society -- An algorithm for tensor product approximation of three-dimensional material data for implicit dynamics simulations -- Track of Applications of Matrix Methods in Artificial Intelligence and Machine Learning Applications of Matrix Methods in Artificial Intelligence and Machine Learning -- On Two Kinds of Dataset Decomposition -- A Graph-based Algorithm for Supervised Image Classification -- An Adversarial Training Framework for Relation Classification -- Topic-Based Microblog Polarity Classification Based on Cascaded Model -- An Efficient Deep Learning Model for Recommender Systems -- Standardization of Featureless Variables for Machine Learning Models using Natural Language Processing (NLP) -- Generalized Variable Conversion using K-means Clustering and Web Scraping -- Parallel Latent Dirichlet Allocation on GPUs -- Improving Search through A3C Reinforcement Learning based Conversational Agent -- Track of Architecture, Languages, Compilation and Hardware support for Emerging ManYcore systems Architecture Emulation and Simulation of Future Many-Core Epiphany RISC Array Processors -- Automatic mapping for OpenCL-Programs on CPU/GPU Heterogeneous Platforms -- Track of Biomedical and Bioinformatics Challenges for Computer Science, 11th Workshop on Biomedical and Bioinformatics Challenges for Computer Science: new computational models, algorithms and computer architectures -- Combining Data Mining Techniques to Enhance Cardiac Arrhythmia Detection -- CT medical imaging reconstruction using direct algebraic methods with few projections -- On blood viscosity and its correlation with biological parameters -- Development of Octree-Based High-Quality Mesh Generation Method for Biomedical Simulation -- 1,000x Faster than PLINK: Genome-Wide Epistasis Detection with Logistic Regression Using Combined FPGA and GPU Accelerators -- Track of Computational Finance and Business Intelligence -- Deep Learning and Wavelets for High-Frequency Price Forecasting -- Kernel Extreme Learning Machine for Learning from Label Proportions -- Extreme Market Prediction for Trading Signal with Deep Recurrent Neural Network -- Multi-view Multi-task Support Vector Machine -- Research on Stock Price Forecast Based on News Sentiment Analysis –A Case Study of Alibaba -- Parallel Harris Corner Detection on Heterogeneous Architecture -- A New Method for Structured Learning with Privileged Information -- An Effective Model between Mobile Phone Usage and P2P Default Behavior -- A Novel Data Mining Approach towards Human Resource Performance Appraisal -- Word Similarity Fails in Multiple Sense Word Embedding -- Track of Computational Optimization, Modelling and Simulation A hybrid optimization algorithm for electric motor design -- Dynamic Current Distribution in the Electrodes of Submerged Arc Furnace using Scalar and Vector Potentials -- Optimizing Deep Learning by Hyper Heuristic Approach for Classifying Good Quality

Images -- An Agent-based Distributed Approach for Bike Sharing Systems -- A fast vertex-swap operator for the prize-collecting Steiner tree problem -- Solving CSS-Sprite Packing Problem using a Transformation to the Probabilistic Non-Oriented Bin Packing Problem -- Optimization of Resources Selection for Jobs Scheduling in Heterogeneous Distributed Computing Environments -- Explicit Size-Reduction-Oriented Design of a Compact Microstrip Rat-Race Coupler Using Surrogate-Based Optimization Methods -- Stochastic-Expansions-Based MAPOD Analysis of the Spherically-Void-Defect Benchmark Problem -- Accelerating Optical Absorption Spectra and Exciton Energy Computation via Interpolative Separable Density Fitting -- Model-Assisted Probability of Detection for Structural Health Monitoring of Flat Plates -- Track of Data, Modeling, and Computation in IoT and Smart Systems Anomalous Trajectory Detection between Regions of Interest Based on ANPR System -- Dynamic real-time infrastructure planning and deployment for disaster early warning systems -- Calibration and Monitoring of IoT Devices by Means of Embedded Scientific Visualization Tools -- Gated Convolutional LSTM for Speech Commands Recognition -- Enabling machine learning on resource constrained devices by source code generation of the learned models -- Track of Data-Driven Computational Sciences Fast Retrieval of Weather Analogues in a Multi-petabytes Archive using Wavelet-based Fingerprints -- Assimilation of fire perimeters and satellite detections by minimization of the residual in a fire spread model -- Analyzing Complex Models using Data and Statistics -- Research on Technology Foresight Method Based on Intelligent Convergence in Open Network Environment -- Prediction of Blasting Vibration Intensity by Improved PSO-SVR on Apache Spark Cluster -- Bisections-weighted-by-element-size-and-order algorithm to optimize direct solver performance on 3D hp-adaptive grids -- Establishing EDI for a Clinical Trial of a Treatment for Chikungunya -- Deadlock Detection in MPI Programs Using Static Analysis and Symbolic Execution -- Track of Mathematical-Methods-and-Algorithms for Extreme Scale Reproducible Roulette Wheel Sampling for Message Passing Environments -- Speedup of Bicubic Spline Interpolation -- Track of Multiscale Modelling and Simulation Multiscale Modelling and Simulation, 15th International Workshop -- Optimized Eigenvalue Solvers for the Neutron Transport Equation -- Multi-scale homogenization of pre-treatment rapid and slow filtration processes with experimental and computational validations. - The solution of the lambda modes problem using block iterative eigensolvers -- A Versatile Hybrid Agent-Based, Particle and Partial Differential Equations Method to Analyze Vascular Adaptation -- Development of a multiscale simulation approach for forced migration.

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.