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Nota di contenuto	Distributed Computing: Benchmarking DAG Scheduling Algorithms on Scientific Workflow Instances -- Classification of Cells Mapping Schemes Related to Orthogonal Diagonal Latin Squares of Small Order -- Comparative Analysis of Digitalization Efficiency Estimation Methods using Desktop Grid -- Diagonalization and Canonization of Latin Squares -- Probabilistic Modeling of the Behavior of a Computing Node in the Absence of Tasks on the Project Server -- Using Virtualization Approaches to Solve Deep Learning Problems in Voluntary Distributed Computing Projects -- Workflows of the High-Throughput Virtual

Screening as a Service -- HPC, BigData, AI: Algorithms, Technologies, Evaluation: 3D Seismic Inversion for Fracture Model Reconstruction Based on Machine Learning -- A Computational Model for Interactive Visualization of High-Performance Computations -- An Algorithm for Mapping of Global Adjacency Lists to Local Numeration in a Distributed Graph in the GridSpiderPar Tool -- Construction of Locality-Aware Algorithms to Optimize Performance of Stencil Codes on Heterogeneous Hardware -- Development of Components for Monitoring and Control Intelligent Information System -- Image Segmentation Algorithms Composition for Obtaining Accurate Masks of Tomato Leaf Instances -- Implementation of Dusty Gas Model Based on Fast and Implicit Particle-Mesh Approach SPH-IDIC in Open-Source Astrophysical Code GADGET-2 -- MDProcessing.jl: Julia Programming Language Application for Molecular Dynamics Trajectory Processing -- Methods and Algorithms for Intelligent Video Analytics in the Context of Solving Problems of Precision Pig Farming -- Nucleic Acid-Protein Interaction Prediction Using Geometric Deep Learning -- Parallel Algorithm for Incompressible Flow Simulation Based on the LS-STAG and Domain Decomposition Methods -- Parallel Algorithm for Source Type Recovering by the Time Reversal Mirror -- Recognition of Medical Masks on People's Faces in Difficult Decision-making Conditions -- Use of Different Metrics to Generate Training Datasets for a Numerical Dispersion Mitigation Neural Network -- Validity and Limitations of Supervised Learning for Phase Transition Research.

Sommario/riassunto

The two-volume set LNCS 14388 and 14389 constitutes the refereed proceedings of the 9th Russian Supercomputing Days International Conference (RuSCDays 2023) held in Moscow, Russia, during September 25-26, 2023. The 44 full papers and 1 short paper presented in these proceedings were carefully reviewed and selected from 104 submissions. The papers have been organized in the following topical sections: supercomputer simulation; distributed computing; and HPC, BigData, AI: algorithms, technologies, evaluation.
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