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Nota di contenuto	Second International Workshop on the Application of Machine Learning Techniques to Computational Fluid Dynamics and Solid Mechanics Simulations and Analysis -- Machine-Learning-Based Control of Perturbed and Heated Channel Flows -- Novel DNNs for Stiff ODEs with Applications to Chemically Reacting Flows -- Lettuce: PyTorch-based Lattice Boltzmann Framework -- Reservoir computing in reduced order modeling for chaotic dynamical systems -- Film cooling prediction and optimization based on deconvolution neural network --

Turbomachinery Blade Surrogate Modeling using Deep Learning -- A Data-driven Wall-shear Stress Model for LES using Gradient Boosted Decision Trees -- Nonlinear mode decomposition and reduced-order modeling for three-dimensional cylinder flow by distributed learning on Fugaku -- Using physics-informed enhanced super-resolution generative adversarial networks to reconstruct mixture fraction statistics of turbulent jet flows -- HPC I/O in the Data Center -- Toward a Workflow for Identifying Jobs with Similar I/O Behavior Utilizing Time Series Analysis -- H3: An Application-Level, Low-Overhead Object Store -- Compiler-assisted Correctness Checking and Performance Optimization for HPC -- Automatic partitioning of MPI operations in MPI+OpenMP applications -- heimdallr: Improving Compile Time Correctness Checking for Message Passing with Rust -- Potential of Interpreter Specialization for Data Analysis -- Refactoring for Performance with Semantic Patching: Case Study with Recipes -- Negative Perceptions About the Applicability of Source-to-Source Compilers in HPC: A Literature Review -- Machine Learning on HPC Systems -- Automatic Tuning of Tensorflow's CPU Backend using Gradient-Free Optimization Algorithms -- MSM: Multi-Stage Multicuts for Scalable Image Clustering -- OmniOpt - a tool for hyperparameter optimization on HPC -- Parallel/distributed intelligent hyperparameters search for GANs -- Machine learning for generic energy models of high performance computing resources -- Fourth International Workshop on Interoperability of Supercomputing and Cloud Technologies -- Automation for Data-Driven Research with the NERSC Superfacility API -- A Middleware Supporting Data Movement inComplex and Software-Defined Storage andMemory Architectures -- Second International Workshop on Monitoring and Operational Data Analytics -- An Operational Data Collecting and Monitoring Platform for Fugaku: System Overviews and Case Studies in the Prelaunch Service Period -- An Explainable Model for Fault Detection in HPC Systems -- Sixteenth Workshop on Virtualization in High--Performance Cloud Computing -- A Scalable Cloud Deployment Architecture for High-Performance Real-Time Online Interactive Applications -- Leveraging HW approximation for exploiting performance-energy trade-offs within the edge-cloud computing continuum -- Datashim and its applications in Bioinformatics -- FaaS and Curious: Performance implications of serverless functionson edge computing platforms -- Differentiated performance in NoSQL database access for hybrid Cloud-HPC workloads -- Deep Learning on Supercomputers -- JUWELS Booster - A Supercomputer for Large-Scale AI Research -- Fifth International Workshop on In Situ Visualization -- In Situ Visualization of WRF Data using Universal Data Junction -- Catalyst Revised: Rethinking the ParaView In Situ Analysis and Visualization API -- Fides: A General Purpose Data Model Library for Streaming Data.-Including in-situ visualization and analysis in PDI.-.

Sommario/riassunto