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Soggetti	Computer engineering Computer networks Software engineering Application software Microprogramming Logic design Computer Engineering and Networks Software Engineering Computer and Information Systems Applications Control Structures and Microprogramming Logic Design
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Compiler-assisted Correctness Checking and Performance Optimization for HPC -- Compiler-assisted Instrumentation Selection for Large-scale C++ Codes -- Lightweight Array Contraction by Trace-Based Polyhedral Analysis -- Detecting scale-induced overflow bugs in production HPC codes -- HPC on Heterogeneous Hardware (H3) -- AI Benchmarking for Science: Efforts from the MLCommons Science Working Group -- Performance Analysis of Matrix Multiplication for

Deep Learning on the Edge -- Strategies for efficient execution of Pipelined Conjugate Gradient method on GPU systems -- A Multi-Level Platform-Independent GPU API for High-Level Programming Models -- Precise Energy Consumption Measurements of Heterogeneous Artificial Intelligence Workloads -- Malleability Techniques Applications in High Performance Computing -- Detecting interference between applications and improving the scheduling using malleable application proxies -- An Emulation Layer for Dynamic Resources with MPI Sessions -- Exploiting OpenMP malleability with free agent threads and DLB -- QR Factorization using Malleable BLAS on Multicore Processors -- IMSS: In-Memory Storage System for Data Intensive Applications -- On the Convergence of Malleability and the HPC PowerStack: Exploiting Dynamism in Over-Provisioned and Power-Constrained HPC Systems -- Fifth Workshop on Interactive High Performance Computing -- Interactive, Cloud-Native Workflows on HPC Using KNoC -- Workflows to driving high-performance interactive supercomputing for urgent decision making -- 3rd ISC HPC International Workshop on Monitoring & Operational Data Analytics -- Data Center Facility Monitoring with Physics Aware Approach -- Rule-based Thermal Anomaly Detection for Tier-0 HPC Systems -- 6th International Workshop on In Situ Visualization -- InSitu Analysis and Visualization of Extreme-Scale Particle Simulations -- Insite: A Pipeline Enabling In-Transit Visualization and Analysis for Neuronal Network Simulations -- The Need for Pervasive In Situ Analysis and Visualization (P-ISAV) -- Interactive Visualization of Large-Scale Oil and Gas Reservoir Simulation Models -- Cinema Transfer: a Containerized Visualization Workflow -- 17th Workshop on Virtualization in High Performance Cloud Computing -- Virtual Clusters: Isolated, Containerized HPC Environments in Kubernetes -- Analyzing Unikernel Support for HPC: Experimental Study of OpenMP -- On the use of Linux Real-Time Features for RAN Packet Processing in Cloud Environments -- eBPF-based Extensible Paravirtualization.

Sommario/riassunto