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Nota di contenuto	100% Visibility At MHz Speed: Efficient Soft Scan-Chain Insertion on AMD/Xilinx FPGAs -- FPGA-Accelerated Terso_ Multi-Body Potential for Molecular Dynamics Simulations -- A Runtime Programmable Accelerator for Convolutional and Multilayer Perceptron Neural Networks on FPGA -- A Multi-FPGA Scalable Framework for Deep Reinforcement Learning through Neuroevolution -- Development Progress of SWLBM a Framework Based on Lattice Boltzmann Method for Fluid Dynamics Simulation -- Entropy-based Early-exit in a FPGA-based Low-precision Neural Network -- FPGA-extended General Purpose Computer Architecture -- Multi-Spectral In-vivo FPGA-based Surgical Imaging -- Hardware-Aware Optimizations for Deep Learning Inference on Edge Devices -- IPEC: Open-Source Design Automation for Inter-Processing Element Communication -- Light-weight Permutation Generator for E_cient Convolutional Neural Network Data

Augmentation -- Real-time embedded object tracking with Discriminative Correlation Filters using convolutional features -- VenOS: A virtualization framework for multiple tenant accommodation on reconfigurable platforms.

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**Sommario/riassunto**

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This book constitutes the proceedings of the 18th International Symposium on Applied Reconfigurable Computing, ARC 2022, held as a virtual event, in September 2022. The 13 full papers presented in this volume were reviewed and selected from 16 submissions. The papers cover a broad spectrum of applications of reconfigurable computing, from driving assistance, data and graph processing acceleration, computer security to the societal relevant topic of supporting early diagnosis of Covid infectious conditions.

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