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Soggetti	Programming languages (Electronic computers) Computer networks Computer programming Computer systems Programming Language Computer Communication Networks Programming Techniques Computer System Implementation Programació en paral·lel (Informàtica) Processament en paral·lel (Ordinadors) Compiladors (Programes d'ordinador) Congressos Llibres electrònics
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Code and Data Transformations An Affine Scheduling Framework for Integrating Data Layout and Loop Transformations -- Guiding Code Optimizations with Deep Learning-Based Code Matching -- Expanding Opportunities for Array Privatization in Sparse Computations -- OpenMP and Fortran Concurrent Execution of Deferred OpenMP Target Tasks with Hidden Helper Threads -- Using Hardware Transactional

Memory to Implement Speculative Privatization in OpenMP --
Improving Fortran Performance Portability -- Domain Specific
Compilation COMET: A Domain-Specific Compilation of High-
Performance Computational Chemistry -- G-Code Re-compilation and
Optimization for Faster 3D Printing -- Li Machine Language and
Quantum Computing Optimized Code Generation for Deep Neural
Networks -- Thermal-Aware Compilation of Spiking Neural Networks to
Neuromorphic Hardware -- A Quantum-Inspired Model For Bit-Serial
SIMD-Parallel Computation -- Performance Analysis Enhancing the
Top-Down Microarchitectural Analysis Method Using Purchasing Power
Parity Theory -- Code Generation Cain: Automatic Code Generation for
Simultaneous Convolutional Kernels on Focal-plane Sensor-processors
-- Reordering Under the ECMAScript Memory Consistency Model --
Verification of Vectorization of Signal Transforms.

Sommario/riassunto

This book constitutes the thoroughly refereed post-conference proceedings of the 33rd International Workshop on Languages and Compilers for Parallel Computing, LCPC 2020, held in Stony Brook, NY, USA, in October 2020. Due to COVID-19 pandemic the conference was held virtually. The 15 revised full papers were carefully reviewed and selected from 19 submissions. The contributions were organized in topical sections named as follows: Code and Data Transformations; OpenMP and Fortran; Domain Specific Compilation; Machine Language and Quantum Computing; Performance Analysis; Code Generation.
