

## Table of Contents

Hardware Accelerator for Low-Latency Privacy Preserving Mechanism <i>Junichi Sawada and Hiroaki Nishi</i>	1
Distributed-Shared CUDA: Virtualization of Large-Scale GPU Systems for Programmability and Reliability <i>Atsushi Kawai, Kenji Yasuoka, Kazuyuki Yoshikawa, and Tetsu Narumi</i>	7
Parallel Approaches for Mining Fuzzy Orderings based Gradual Patterns <i>Malaquias Quintero Flores, Federico Del Razo, Anne Laurent, and Nicolas Sicard</i>	13
Paper Recommendation System: A Global and Soft Approach <i>Siwipa Pruitikane, Lisa Di Jorio, Anne Laurent, and Michel Sala</i>	21
Balancing Communication and Execution Technique for Parallelized Sparse Matrix-Vector Multiplication <i>Seiji Fujino, Takeshi Nanri, and Ken'itiro Kusaba</i>	28
Implementation and Evaluation of Recurrence Equation Solvers on GPGPU Systems Using Rearrangement of Array Configurations <i>Akiyoshi Wakatani</i>	32
Statistical Analysis of Cost of Energy due to Electricity Outages in Developing Countries <i>Venkat Natarajan and Amit Closepet</i>	39
The Ontological Programming Paradigm <i>Valeriya Gribova and Alexander Kleschev</i>	45
JION: A JavaSpaces Implementation for Opportunistic Networks <i>Abdulkader Benchi, Pascale Launay, and Frederic Guidec</i>	49
Semantic Numerical Operations on Strings <i>Taeho Jo</i>	55
Normalized Table Matching Algorithm for Classifying News Articles <i>Taeho Jo</i>	61
A Dynamic (m,k)-firm Constraint to Avoid Dynamic Failures in a Real-Time DBMS <i>Sami Limam, Leila Baccouche, and Henda Ben Ghezala</i>	67
Multiple Trajectory Search for the Resource-Constrained Project Scheduling Problem <i>Lin-Yu Tseng and Kuan-Cheng Lin</i>	74

Feature Selection for Clustering by Exploring Nearest and Farthest Neighbors <i>Chien-Hsing Chen</i>	80
Fuzzy Computer Architecture Based on Memristor Circuits <i>Martin Klimo and Ondrej Such</i>	84
Simulation of Carry Protocol (c-protocol) for MANET Network <i>Ahmed Alghamdi, John DeDourek, and Przemyslaw Pochec</i>	88
Using Symbolic Substitution Logic as an Automated Design Procedure for QCA Arithmetic Circuits <i>Dietmar Fey and Bruno Kleinert</i>	94