

1. Record Nr.	UNINA9910842292303321
Autore	Tari Zahir
Titolo	Algorithms and Architectures for Parallel Processing : 23rd International Conference, ICA3PP 2023, Tianjin, China, October 20-22, 2023, Proceedings, Part II
Pubbl/distr/stampa	Singapore : , : Springer, , 2024 ©2024
ISBN	981-9708-01-X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (524 pages)
Collana	Lecture Notes in Computer Science Series ; ; v.14488
Altri autori (Persone)	LiKeqiu WuHongyi
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface -- Organization -- Contents - Part II -- LearnedSync: A Learning-Based Sync Optimization for Cloud Storage -- 1 Introduction -- 2 Background and Motivation -- 2.1 Cloud Sync -- 2.2 Workload Characteristics and Environmental Conditions -- 2.3 Motivation -- 3 The Design of LearnedSync -- 3.1 System Overview -- 3.2 State Monitor -- 3.3 Sync Method Selector -- 3.4 Sync Record Directory -- 3.5 The Training Process for LearnedSync -- 4 Performance Evaluations -- 4.1 Prototype Implementation -- 4.2 Experimental Setup and Methodology -- 4.3 Performance Results and Analysis -- 5 Related Work -- 6 Conclusion -- References -- Optimizing CSR-Based SpMV on a New MIMD Architecture Pezy-SC3s -- 1 Introduction -- 2 Related Work -- 3 Methodology -- 3.1 Row Granularity Matrix Partition -- 3.2 Workload Balance Within Matrix Chunks -- 3.3 Vectorization -- 4 Experimental Results and Evaluation -- 4.1 Preprocessing Overhead -- 4.2 Floating-Point Performance -- 4.3 Bandwidth Utilization -- 4.4 SpeedUp -- 5 Conclusion -- References -- Intrusion Detection Method for Networked Vehicles Based on Data-Enhanced DBN -- 1 Introduction -- 2 Intrusion Detection Model Based on Data Augmentation -- 2.1 Data Processing and Augmentation -- 2.2 Improved DBN Model -- 3 Experimental Design and Result Analysis -- 3.1 Dataset Labels -- 3.2 Experiments and Analysis -- 4 Conclusion -- References -- A Multi-

source Domain Adaption Approach to Minority Disk Failure Prediction
-- 1 Introduction -- 2 Related Work -- 3 Motivation -- 3.1 Problem Statement -- 3.2 Generalization Error Bound Analysis -- 4 Method -- 4.1 Overview of DiskDA -- 4.2 Domain Invariant Representation Learning -- 4.3 Confidence-Based Sample Selection -- 5 Experiment -- 5.1 Methodology -- 5.2 Experimental Results -- 5.3 Sensitivity Study -- 6 Conclusion -- 7 Appendix -- References.

Sequenced Quantization RNN Offloading for Dependency Task in Mobile Edge Computing -- 1 Introduction -- 2 Related Work -- 3 System Model and Problem Formula -- 3.1 System Model -- 3.2 Problem Formula -- 4 Sequenced Quantization Based on RNN Offloading Algorithm -- 4.1 Generation of Unload Actions -- 4.2 Sequenced Quantization Offloading Actions -- 4.3 Experience Pool Recycling -- 5 Simulation Experiments and Result Analysis -- 5.1 Experimental Setup -- 5.2 Algorithm Parameter Selection -- 5.3 Result Analysis -- 5.4 The Impact of the Number of Subtasks on the SQ-RNN Algorithm -- 6 Conclusion -- References -- KylinArm: An Arm Gesture Recognition System for Mobile Devices -- 1 Introduction -- 2 Related Work -- 2.1 IMU-Based Gesture Recognition -- 2.2 Algorithms for Sensor-Based Gesture Recognition -- 3 Design and Implementation of KylinArm -- 3.1 Framework Design of KylinArm -- 3.2 Gesture-Controlled Command Set -- 3.3 Classification Module: Dual-Branch 1D-CNN Classifier -- 3.4 Arm Gesture Recognition -- 3.5 CORAL-Based Generalization Optimization -- 4 Evaluation -- 4.1 DataSet Description -- 4.2 Performance of Dual-Branch 1D-CNN Model -- 4.3 Performance of Inference Modules -- 4.4 Performance of CORALREVERSE -- 4.5 Real-World Evaluation of KylinArm -- 5 Summary -- References -- FCSO: Source Code Summarization by Fusing Multiple Code Features and Ensuring Self-consistency Output -- 1 Introduction -- 2 Related Work -- 3 The Architecture of Approach -- 3.1 Data Preprocessing -- 3.2 Feature Extraction -- 3.3 Feature Fusion -- 3.4 Self-consistency Output -- 4 Experiment -- 4.1 Experiment Settings -- 4.2 Comparison Experiment and Ablation Experiment -- 4.3 Code Summarization Examples -- 5 Conclusion -- References -- Graph Structure Learning-Based Compression Method for Convolutional Neural Networks -- 1 Introduction -- 2 Related Work.

2.1 Compression of CNNs -- 2.2 Graph Structure Learning -- 3 The Proposed Method -- 3.1 Overview -- 3.2 Graph Construction -- 3.3 Graph Structure Learner with Dual-Branch -- 3.4 Pruning Filters -- 4 Experiments -- 4.1 Pruned VGG-16 -- 4.2 Pruned ResNet-101 -- 5 Conclusions and Future Works -- References -- Reliability-Aware VNF Provisioning in Homogeneous and Heterogeneous Multi-access Edge Computing -- 1 Introduction -- 2 Related Work -- 3 Preliminaries -- 3.1 Network Model -- 3.2 Task Model -- 3.3 Cost Model -- 4 Homogeneous MEC Scenario -- 4.1 Reliability Model -- 4.2 Problem Formulation -- 4.3 Local Ratio Based Algorithm -- 4.4 Algorithm Analysis -- 5 Heterogeneous MEC Scenario -- 5.1 Reliability Model -- 5.2 Problem Formulation -- 5.3 Benefit-Cost Ratio Preference Algorithm -- 5.4 Algorithm Analysis -- 6 Simulation Evaluation -- 6.1 Experimental Parameters -- 6.2 Impact of Number of Tasks -- 6.3 Impact of Number of Servers -- 7 Conclusion -- References -- Approximate Query Processing Based on Approximate Materialized View -- 1 Introduction -- 2 Overview -- 2.1 Problem Definition -- 2.2 Data Aggregation -- 3 Reuse of Approximate Materialized View -- 3.1 Aggregation and Precomputing -- 3.2 Approximate Interval Recognition -- 3.3 Analysis for Twice Approximations -- 4 Experimental Results -- 4.1 Experimental Setup -- 4.2 Accuracy -- 4.3 The Summary of Experimental Results -- 5 Influence of Parameters --

5.1 Sample Size -- 5.2 Number of Partition Points -- 5.3 The Summary of Parameter Setting -- 6 Related Work -- 7 Conclusion -- References -- Schema Integration on Massive Data Sources -- 1 Introduction -- 2 Preliminary -- 2.1 Knowledge Base -- 2.2 Distance Function -- 2.3 Edit Distance and Q-Gram -- 2.4 Problem Definition -- 3 Overview -- 3.1 Initialization -- 3.2 Batch Integration -- 3.3 Incremental Integration -- 3.4 Verification.

4 Join Schema Integration -- 4.1 ED Join -- 4.2 Semantic Join -- 5 Batch Integration -- 5.1 Flow of Batch Integration -- 5.2 Resolving -- 6 Experiments -- 6.1 Experimental Settings -- 6.2 Accuracy -- 6.3 Efficiency -- 7 Related Work -- 8 Conclusions and Future Work -- References -- A Hybrid Few-Shot Learning Based Intrusion Detection Method for Internet of Vehicles -- 1 Introduction -- 2 Design of Intrusion Detection Model for IoV -- 2.1 Data Pre-processing -- 2.2 Feature Extraction -- 3 Meta-learning Training Network Process -- 4 Simulation and Results Evaluation -- 4.1 Metrics -- 4.2 Experimental Results and Comparative Analysis -- 5 Conclusion -- References -- Noise-Robust Gaussian Distribution Based Imbalanced Oversampling -- 1 Introduction -- 2 Related Work -- 2.1 Resampling Methods -- 2.2 Gaussian Distribution Based Oversampling (GDO) -- 3 Proposed Method -- 3.1 Analysis of the GDO Algorithm -- 3.2 Local Information of Samples -- 3.3 Estimation of Weight for Minority Class Sample Selection -- 3.4 Probabilistic Seed Sample Selection and Time Complexity -- 4 Experiments and Analysis -- 4.1 Experimental Settings -- 4.2 Experimental Results and Analysis -- 5 Conclusion -- References -- LAST: An Efficient In-place Static Binary Translator for RISC Architectures -- 1 Introduction -- 2 Background -- 2.1 Static Binary Translation -- 2.2 Address Relocation Problem in SBT -- 2.3 Performance Overhead in SBT -- 3 Design -- 3.1 Overview -- 3.2 In-place Instruction Translation Design -- 3.3 System Call Design -- 3.4 ISA-Level Support -- 4 Implementation -- 4.1 Register Mapping -- 4.2 In-place Instruction Translation -- 4.3 System Call Handling -- 4.4 Delay Slot -- 5 Evaluation -- 5.1 Evaluation Setup -- 5.2 Performance -- 5.3 Translation vs. Compilation -- 6 Conclusion -- References.

Personalized Privacy Risk Assessment Based on Deep Neural Network for Image Sharing on Social Networks -- 1 Introduction -- 2 Related Work -- 3 The Framework of PPRAS -- 3.1 Problem Description and Definition -- 3.2 The Framework of PPRAS -- 4 Experimental Results and Evaluation -- 4.1 Dataset -- 4.2 Evaluation Metrics and Baseline Methods -- 4.3 Train the Neural Network -- 4.4 Comparison of PPRAS and Two Variants in Three Performance Metrics -- 4.5 Comparison of PPRAS and Two Variants in Time Utility -- 4.6 Utility Analysis -- 4.7 Parametric Analysis -- 5 Conclusions -- References -- A Pipelined AES and SM4 Hardware Implementation for Multi-tasking Virtualized Environments -- 1 Introduction -- 2 Background -- 2.1 Overview of AES and SM4 -- 2.2 Related Works and Discussion -- 3 Proposed AES and SM4 Architecture -- 3.1 AES Encryption and Decryption Architecture -- 3.2 SM4 Encryption/Decryption Architecture -- 4 A Prototype Cryptosystem for Virtualization -- 4.1 Prototype Cryptosystem Architecture -- 4.2 Programming Sequence of the Prototype Cryptosystem -- 5 Experimental Results -- 5.1 Circuit Performance Comparison -- 5.2 Multi-guest Efficiency Improvement -- 6 Discussion -- 7 Conclusion -- References -- Blockchain-Assisted Privacy-Preserving Public Auditing Scheme for Cloud Storage Systems -- 1 Introduction -- 2 Related Work -- 3 Technical Preliminaries -- 3.1 Bilinear Pairing and Hardness Problem -- 3.2 Homomorphic Hash Function -- 3.3 System Model -- 3.4 Adversary Model and Design Goals -- 4 Our Protocol -- 5 Evaluation of the Proposed Mechanism --

5.1 Correctness -- 5.2 Security Analysis -- 6 Comprehensive Performance Evaluation -- 6.1 Comparison of the Computation Costs -- 6.2 Comparison of the Communication Overhead -- 6.3 On-Chain Consumption Evaluation -- 7 Conclusions and Future Work -- References.
MANet: An Architecture Adaptive Method for Sparse Matrix Format Selection.
