

ISPDC 2015

14th International Symposium on Parallel and Distributed Computing
29/Jun - 01/Jul 2015 | Limassol, Cyprus

The 14th International Symposium on Parallel and Distributed Computing

June 29-July 1, 2015 - Limassol, Cyprus

<http://www.cyprusconferences.org/ispdc2015/>

Conference Programme

Monday June 29, 2015

08:00 – 09:00 Registration

09:00 – 09:15 Opening remarks

Invited Talk 1

09:15 – 10:30 Getting Ready for Approximate Computing: Trading Parallelism for Accuracy for DSS Workloads

Pedro Trancoso

10:30 – 11:00 Coffee break

Session 1: GPU

Chair: Oleg Sukhoroslov

GPU-Accelerated Digital Halftoning by the Local Exhaustive Search

Hiroaki Kouge, Yasuaki Ito, and Koji Nakano

11:00 – 12:30

Analyzing Memory Access on CPU-GPGPU Shared LLC Architecture

Jianliang Ma, Licheng Yu, Tianzhou Chen, and Minghui Wu

DART-CUDA: A PGAS Runtime System for Multi-GPU Systems

Lei Zhou and Karl Fuerlinger

12:30 – 14:00 Lunch break

Session 2: Security

Chair: Stelios Sotiriadis

High-Speed Security Analytics Powered by In-Memory Machine Learning Engine

Andrey Sapegin, Marian Gawron, David Jaeger, Feng Cheng, and Christoph Meinel

14:00 – 15:30

A New Secure Virtual Connector Approach for Communication within Large Distributed Systems

Gabriel Risterucci, Traian Muntean, and Léon Mugwaneza

A Parallel Method for Scalable Anonymization of Transaction Data

Neelam Memon, Grigorios Loukides, and Jianhua Shao

15:30 – 16:00 Coffee break

Session 3: Optimization and program verification

Chair: Mariana Mocanu

XFOR: Filling the Gap between Automatic Loop Optimization and Peak Performance

Imen Fassi and Philippe Clauss

16:00 – 17:30

Optimizing Data Accesses for Breadth-First Search on Shared Memory Computers

Ziqian Hu and Huashan Yu

A Symbolic Approach to Permission Accounting for Concurrent Reasoning

Marieke Huisman and Wojciech Mostowski

Position Paper

17:30 – 18:00

The Distributed Mobile Cloud Supporting the Internet of Things

Dan Grigoras and Pawel Gepner

19:00

Welcome Reception

Tuesday June 30, 2015

08:00 – 09:00 Registration

Invited Talk 2

09:00 – 10:30 dataClay: The Integration of Persistent Data, Parallel Programming Models, and True Sharing

Toni Cortes

10:30 – 11:00 Coffee break

Session 4: Multicore Programming

Chair: Ausif Mahmood

Multilevel Task Parallelism Exploitation on Asymmetric Sets of Tasks and When Using Third-Party Tools

11:00 – 12:30 *Diogo Telmo Neves*

Cache Affinity Optimization Techniques for Scaling Software Transactional Memory Systems on Multi-CMP Architectures

Kinson Chan, King Tin Lam, and Cho-Li Wang

Contention Adapting Search Trees

Konstantinos Sagonas and Kjell Winblad

12:30 – 14:00 Lunch break

Session 5: Routing and Parallel Hardware Algorithms

Chair: Dan Grigoras

A Simulator for Analysis of Opportunistic Routing Algorithms

Cristian Chilipirea, Andreea-Cristina Petre, Ciprian Dobre, Florin Pop, and George Suciu

14:00 – 15:30 Maximally Adaptive, Deadlock-Free Routing in Spidergon-Donut Network for Large Multicore NOCs

Marwah Albughdar and Ausif Mahmood

Optimal Parallel Hardware K-Sorter and Top K-Sorter, with FPGA Implementations

Naoyuki Matsumoto, Koji Nakano, and Yasuaki Ito

15:30 – 16:00 Coffee break

Session 6: Cloud Computing

Chair: Cho-Li Wang

Personalized Motion Sensor Driven Gesture Recognition in the FIWARE Cloud Platform

Alexandros Preventis, Kostas Stravoskoufos, Stelios Sotiriadis, and Euripides G.M. Petrakis

16:00 – 18:00 Robust Cloud Management of MANET Checkpoint Sessions

Hazzaa Naif Alshareef and Dan Grigoras

Soil Management Services in CLUeFARM

Adil Serrouch, Mariana Mocanu, and Florin Pop

Resource Efficiency to Partition Big Streamed Graphs

Victor Medel Gracia and Unai Arronategui Arribalzaga

19:30 **Conference Dinner (Meet at lobby)**

Wednesday July 1, 2015

Session 7: Scheduling

Chair: Diogo Telmo Neves

Investigating the Resilience of Dynamic Loop Scheduling in Heterogeneous Computing Systems
Nitin Sukhija, Ioana Banicescu, and Florina M. Ciorba

09:00 – 10:30

Schedule Dynamic Multiple Parallel Jobs with Precedence-Constrained Tasks on Heterogeneous Distributed Computing Systems

Liangjiao Liu, Guoqi Xie, Liu Yang, and Renfa Li

BOLAS: Bipartite-Graph Oriented Locality-Aware Scheduling for MapReduce Tasks

Ruini Xue, Shengli Gao, Lixiang Ao, and Zhongyang Guan

10:30 – 11:00 Coffee break

Session 8: Storage, file systems and web services

Chair: Florina Ciorba

Availability in the Flexible and Adaptable Distributed File System

Danilo Costa Marin Segura, Matheus Della Croce Oliveira, Thiago Kenji Okada, Renata Spolon Lobato, Aleardo Manacero Jr., Lúcio Rodrigo de Carvalho, and Roberta Spolon

11:00 – 12:30

Rethinking HBase: Design and Implementation of an Elastic Key-Value Store over Log-Structured Local Volumes

Giorgos Saloustros and Kostas Magoutis

A Web-Based Platform for Publication and Distributed Execution of Computing Applications

Oleg Sukhoroslov, Sergey Volkov, and Alexander Afanasiev

12:30 – 14:00 Lunch break

Invited Talk 3

14:00 – 15:30

Intel Architecture and Technology for Future HPC System Building Blocks

Pawel Gepner

15:30 – 16:00 Closing remarks