The 15th IEEE International Conference on Computational Science and Engineering (IEEE CSE2012)

Program

December 5th			
Time	**Session 1**	**Session 2**	**Session 3**
	Room Akamas 1		
09:00 - 10:30	Keynote: Santosh Kumar Title: Mobile Measurement of Behavioral and Social Health at Population Scale - Implications for Computing Research		
10:30 - 11:00	Coffee Break		
	Room Akamas 1	*Room Akamas 2*	*Room Akamas 3*
11:00 - 12:30	EUC-1: Application-Specific Architectures	EUC-2: Smart Mobile Systems	CSE-1: CSE Applications I
12:30 - 13:30	Lunch		
13:30 - 15:00	EUC-3: Special Session 1 - Virtualization and adaptive systems	EUC-4: Power-Aware Systems	CSE-2: CSE Applications II
15:00 - 15:30	Coffee Break		
15:30 - 17:00	EUC-5: Special Session 2 - New frontiers in multicore and reconfigurable computing systems	EUC-6: Multiprocessors: Memories and Fault-Tolerance	CSE-3: Database and Data Mining I

December 6th			
Time	**Session 1**	**Session 2**	**Session 3**
	Room Akamas 1		
09:00 – 09:30	Awards		
09:30 - 10:30	Keynote: Professor Geyong Min Title: Performance Analysis and Optimization of Integrated Scheduling Systems in Wireless Multimedia Networks		
10:30 - 11:00	Coffee Break		
	Room Akamas 1	*Room Akamas 2*	*Room Akamas 3*
11:00 - 12:30	EUC-7: Storage	EUC-8: Distributed and Smart Sensing	CSE-4: Database and Data Mining II
12:30 - 13:30	Lunch		
13:30 - 15:00	EUC-9: Smart Mobile Systems: Performance, Security and Reliability	EUC-10: Scheduling Techniques	CSE-5: Scientific and Engineering Computing I
15:00 - 15:30	Coffee Break		
15:30 - 17:00	EUC-11: Model Driven and *-Aware Systems	EUC-12: From Embedded Processors to Distributed Systems	CSE-6: Scientific and Engineering Computing II

December 7th			
Time	**Session 1**	**Session 2**	**Session 3**
	Room Akamas 1	*Room Akamas 2*	*Room Akamas 3*
09:00 - 10:30	EUC-13: Real Time Systems	CSE-7: Distributed and Parallel Computing I	CSE-8: Security, Privacy and Trust I
10:30 - 11:00	Coffee Break		
11:00 - 12:30	EUC-14: Data Quality and Quality of Service	EUC-15: Dependability and Security	CSE-9: Security, Privacy and Trust II
12:30 - 13:30	Lunch		
13:30 - 15:00	EUC-16: Smart Environments	CSE-10: Embedded and Ubiquitous Computing	CSE-11: Advanced Networking and Applications
15:00 - 15:30	Coffee Break		
15:30 – 17:00	EUC-17: UUWSN2012: Underwater Wireless Communication	CSE-12: Services, Internet and Parallel Computing	CSE-13: Intelligent and Bio-inspired Computing

Session CSE-1: CSE Applications I

Chair: Marco Kuhrmann

1. Building Input Adaptive Parallel Applications: A Case Study of Sparse Grid Interpolation
   Alin Murarasu
2. A Lightweight Middleware for developing P2P Applications with Component and Service-Based Principles
   Ayoub Ait Lahcen, Didier Parigot
3. An Efficient Approach for Nozzle Rocket Thrust Estimation
   Pansaporn Sribonfha, Sirod Sirisup, Pawat Chusilp, Weerachart Kulsirikasem

Session CSE-2: CSE Applications II

Chair: Pawat Chusilp

1. Automatic Scaling of Complex-event Processing Applications in Eucalyptus
   Irina Astrova, Arne Koschel, Marc Schaaf
2. DCA:Dynamic Challenging Level Adapter for Real-time Strategy Games
   Nai-Yan Yang, Shin-Hung Chang
3. A GRASP-based heuristic for the Project Portfolio Selection Problem
   Cleber Mira, Pedro Feijão, Maria Souza, Arnaldo Moura, João Meidanis, Gabriel Lima, Renato Bossolan, Ítalo Freitas
4. Allocation of hard real-time periodic tasks for reliability maximization in distributed systems
   Hamid Reza Faragardi, Reza Shojaee, Mazyar Mirzazad, Naser Yazdani

Session CSE-3: Database and Data Mining I

Chair: John O'Donnel

1. O2-Tree: A Fast Memory Resident Index for NoSQL Data-Store
   Daniel Ohene-Kwofie, Ekow Otoo, Gideon Nimako
2. Clustering to Deal with the New User Problem
   Christos Bouras, Vassilis Tsogkas
3. Runtime Characterization of Triple Stores
   Long Cheng, Spyros Kotoulas, Tomas Ward, Georgios Theodoropoulos

Session CSE-4: Database and Data Mining II

Chair: Javier Cubo

1. Automatic Clustering Assessment through a Social Tagging System
   Elisabeteferraz Cunha, Álvaro Figueira
2. A New Concise Representation of Generalized Frequent Itemsets Based on Profile Summary
   Yuxing Mao, Chenghong Zhang, and Hong Ling

3. More Investment in Conceptual Designers: Think about it!
   Selma Khouri, Ladjel Bellatreche, Ilyes Boukhari, Selma Bouarar
4. Applying Security Patterns for Component Based Applications Using UML profile
   Rahma Bouaziz, Bernard Coulette

Session CSE-5: Scientific and Engineering Computing
Chair: Rahma Bouaziz

1. Optimisation and parallelism in synchronous digital circuit simulators
   John O'Donnell, Cordelia Hall
2. Parameter Sweep and Optimization of Loosely Coupled Simulations Using the DAKOTA Toolkit
   Wael Elwasif, David Bernholdt, Sreekanth Pannala, Srikanth Allu, Samantha Foley
3. Implementation of a Data-driven Workflow Management System
   Nahla Haddar, Mohamed Tmar, Faiez Gargouri

Session CSE-6: Scientific and Engineering Computing II
Chair: Didier El Baz

1. Heuristic Method to Find Magic Squares
   Evelín Fonseca Cruz, Enguerran Grandchamp
2. Automatic Tuning of Sparse Matrix-Vector Multiplication for CRS format on GPUs
   Hiroki Yoshizawa, Daisuke Takahashi
3. A new approach for indexing powder diffraction data based on dichotomy method
   Ivan Šimeček

Session CSE-7: Distributed and Parallel Computing I
Chair: Daisuke Takahashi

1. Fault Tolerant Implementation of Peer-to-Peer Distributed Iterative Algorithms
   The Tung Nguyen, Didier El-Baz
2. A Load Balanced Distributed Algorithm to Solve the Permutation Flow Shop Problem Using the Grid
   Samia Kouki, Mohamed Jemni, Talel Ladhari
3. A parallel application programming and processing environment proposal for grid computing
   Augusto Gomes Jr., Liria Sato, Francisco Massetto

Session CSE-8: Security, Privacy and Trust I
Chair: Kamal Salih Taha

1. Protecting Privacy of User Information in Continuous Location-Based Services
   Claudio A. Ardagna, Giovanni Livraga, Pierangela Samarati

2. Supporting Security Requirements for Resource Management in Cloud Computing
   Ravi Jhawar, Vincenzo Piuri, Pierangela Samarati
3. Use of Human Cognition in HIP Design via EmotIcons to Defend BOT Attacks
   Mir Tafseer Nayeem, Md. Saddam Hossain Mukta, Md. Rifat Ahmmad Rashid, Md. Mahbubur Rahman

Session CSE-9: Security, Privacy and Trust II

Chair: Kamal Salih Taha

1. Supporting Security Engineering at Design Time with Adequate Tooling
   Jörn Eichler, Andreas Fuchs, Nico Lincke
2. A Practical Approach to align Research with Master's Level Courses
   Marco Kuhrmann

Session CSE-10: Embedded and Ubiquitous Computing

Chair: Javier Cubo

1. Code Compression in ARM Embedded Systems using Multiple Dictionaries
   Wanderson Roger Azevedo Dias, Edward David Moreno
2. Low power instruction cache with word selective line buffer
   Hyun-Bum Cho, Ju-Hee Choi, Seong-Tae Jhang, Chu-Shik Jhon
3. A Symmetric Compositional Approach for Adaptive Ubiquitous Systems
   Sana FATHALLAH BEN ABDENNEJI, Stéphane Lavirotte, Jean-Yves Tigli, Gaeten Rey, Michel Riveill
4. Extension of the Particle Therapy Simulation Framework to Hospital Information Systems and Multi-grid
   Environments
   Tsukasa Aso, Yoshikazu Maeda, Go Iwai, Wataru Takase, Takashi Sasaki, Tomohiro Yamashita, Takashi Akagi,
   Yuki Nakano

Session CSE-11: Advanced Networking and Applications

Chair: I-Ling Yen

1. A Chain Based Relocation Approach to Maintain Connectivity with a Center of Interest
   Ines Korbi, Sherali Zeadally
2. QoS-Aware LTE Downlink Scheduler for VoIP with Power Saving
   M. Sajid Mushtaq, Abdussalam Shahid, Scott Fowler

Session CSE-12: Services, Internet and Parallel Computing

Chair: Scott Fowler

1. Automated Exception Handling in Service Composition Using Holistic Planning
   Jian Huang, Wei Zhu, Farokh Bastani, I-Ling Yen, Jicheng Fu

2. On the Service Discovery using Context-Awareness, Semantic Matching and Behavioural Compatibility
   Javier Cubo, Ernesto Pimentel
3. Efficient Multi-Core Computations in Computational Statistics and Econometrics
   Panagiotis Michailidis, Konstantinos Margaritis
4. Programming models based on data versioning for dependency-aware task-based parallelisation
   Afshin Zafari, Martin Tillenius, Elisabeth Larsson

Session CSE-13: Intelligent and Bio-inspired Computing
Chair: Sana Fathallah Ben Abdenneji

1. RGRank: Ranking Semantically Related Genes
   Kamal Taha, Dirar Al Homouz, Hassan Al Muhairi
2. Ant Colony Prototype Reduction Algorithm for kNN classification
   Amal MILOUD-AOUIDATE, Ahmed Riadh BABA-ALI