

# **2013 ACS International Conference on Computer Systems and Applications**

**(AICCSA 2013)**

**Ifrane, Morocco  
27-30 May 2013**



**IEEE Catalog Number: CFP13283-POD  
ISBN: 978-1-4799-0791-5**

# Provisional Technical Program

## Monday, May 27, 2013

### Fes: Hotel Fes Medina

- 09:00 a.m. - 12:30 p.m.    **Tutorial 1: Introduction to Sensor Networks**  
Instructor: Dr. Dharma P. Agarwal, University of Ohio
- 12:30 p.m. - 2:00 p.m.    **Lunch**
- 02:00 p.m. - 05:30 p.m.    **Tutorial 2: Introduction to Multicore Architecture**  
Instructor: Dr. and Dean Hesham El-Riwini,  
University of North Dakota

## Tuesday, May 28, 2013

- 08:30 a.m. - 09:00 a.m.    **Opening Ceremony and Updates to Program Schedule**  
General Chair: Dr. Aris M. Ouksel, University of Illinois, Chicago
- 09:00 a.m. - 10:00 a.m.    **Keynote Speech 1: QCRI – Enabling impactful research in the Middle East**  
Dr. Ahmed Elmagarmid  
Qatar Computing Research Institute  
Executive Director
- 10:00 a.m. - 10:20 a.m.    **Break**
- 10:20 a.m. - 12:00 p.m.    **(parallel sessions)**  
**Paper Session 1: Cloud and Distributed Computing I**  
David Newsom, Ahmad Anbar, Tarek El-Ghazawi and Sardar Azari. Predictive Energy Management Techniques for PGAS Programming  
Amal Alhosban, Khayyam Hashmi, Zaki Malik and Brahim Medjahed. Self-healing Framework for Cloud-based Services  
Sara Ibn El Ahrache, Badir Hassan, Parisa Ghodous and Sbihi Abderrahmane. Secure Processing of Large Scale Databases in a Cloud Computing Environment  
Mohcine Madkour, Abdelilah Maach and Driss El Ghanami. Policy Driven Adaptation of Context-aware Services with preferences supporting  
**Paper Session 2: Networking, sensor networks, mobile computing I**  
El Kamel Ali. A bayesian k-NN based scheme for QoS provisioning in IP/MPLS networks  
Hind Alwan and Anjali Agarwal. A Cross-Layer-Based Routing with QoS-Aware Scheduling for Wireless Sensor Networks

Juhi Srivastava and Sudarshan Tsb. Intelligent Traffic Management with Wireless Sensor -

Hanen Idoudi, Fatma Soma and Leila Azouz Saidane. Alarms Management in Wireless Body Area Networks -

**Paper Session 3: IR, Data and knowledge management I**

Ayman Taha and Ali Hadi. A General Approach for Automating Outliers Identification in Categorical Data -

Rasha Bin-Thalab, Neamat El Tazi and Mohamed E. El Sharkawi.. TMIX: Temporal Model for Indexing XML Documents -

Teodor Tzanakakis, Ioannis Papaefstathiou and Charalampos Manifavas. Parallelizing bioinformatics and security applications on a low-cost multi-core system -

Hammou Fadili. Towards a new approach of an automatic and contextual detection of meaning in text -

**Paper Session 4: BPM, Web Services, SOA I**

Khayyam Hashmi, Amal Alhosban, Abdelmounaam Rezgui, Erfan Najmi and Zaki Malik. Automated Web Service Quality Component Negotiation using NSGA-2 -

Hamid Harroud, Hind Seddiki and Leila Bahri. Adaptive Service Provision in Mobile Environments -

Mahmoud El Hamlaoui, Sophie Ebersold, Adil Anwar, Mahmoud Nassar and Bernard Coulette. A Process for Maintaining Heterogeneous Models Consistency through Change Synchronization -

Youness Laghouaouta, Adil Anwar and Mahmoud Nassar. A Traceability Approach for Model Composition -

Fouad Chedid. On Pattern Matching With Swaps -

12:00 p.m. - 01:30 p.m.

**Lunch**

1:30 p.m. - 2:30 p.m.

**Invited Speaker: Dr. Sid Bhattarcharyya**  
**A Large Data Approach to Study Adoption of Social Media in Organizations**

2:45 p.m. - 04:15 p.m.

**(parallel sessions)**

**Paper Session 5: Arabic/Amazigh/Farsi/Urdu language processing I**

Violetta Cavalli-Sforza and Karim Bouzoubaa. Bootstrapping a WordNet for an Arabic Dialect from Other WordNets and Dictionary Resources -

Mohamed Outahajala, Lahbib Zenkouar, Yassine Benajiba and Paolo Rosso. The Development of a Fine Grained Class Set for Amazigh POS Tagging -

Fadi Zaraket and Ameen Jaber. MATAR: Morphology-based Tagger for Arabic -

Ahmed Cherif Mazari, Hassina Aliane and Zaia Alimazighi. A Conceptual

Indexing Approach for Arabic Texts

**Paper Session 6: Security, privacy I**

Muhammad Bilal, Sana Imtiaz, Wadood Abdul and Sanaa Ghouzali.  
Zero-steganography using DCT and Spatial domain

Ala Eshmawi and Suku Nair. Smartphone Applications Security: Survey of  
New Vectors and Solutions

Bilal Al Baalbaki, Youssif Al-Nashif, Salim Hariri and Douglas Kelly. Autonomic  
Critical Infrastructure Protection (ACIP) System

Said Hraoui, Faiq Gmira and Abdelrahim Saaidi. Benchmarking AES and Chaos  
Based Logistic Map for Image Encryption

**Paper Session 7: Semantic Web I**

Zahia Marouf and Sidi Mohamed Benslimane. Fuzzy clustering-based  
approach to derive hierarchical structures from folksonomies

Ali Aajli and Karim Afdel. Towards a new approach of measure of skills applied  
to an adaptive assessments system used in E-Learning and E-Recruitment

Imene Bentounsi and Zizette Boufaida. Extracting candidate terms from  
medical texts

Wassim Derguech and Sami Bhiri. Modelling, Interlinking and Discovering  
Capabilities

**Paper Session 8: Multimedia and Computer vision I**

Noura Aherrahrou and Hamid Tairi. A new robust watermarking scheme based  
on PDE decomposition

Insaf Bellamine and Hamid Tairi. Motion Detection and Tracking using  
Space-Time Interest Points

El Aallaoui Mohamed and Gouch Abdelwahad. Spatio-temporal Segmentation  
with Mumford-Shah Functional

Saliha Aouat. A new Indexing approach using outlines primitives

04:15 p.m. - 04:45 p.m. **Break**

04:30 p.m. - 06:00 p.m. **Poster paper presentations**

## **Wednesday, May 29, 2013**

### **AlAkhawayn University**

09:00 a.m. - 10:00 a.m. **Keynote Speech 2: Future Internet and Implications of Wireless**  
Dr. Dharma P. Agrawal

10:00 a.m. - 10:20 a.m. **Break**

10:20 a.m. - 12:00 p.m.

**(parallel sessions)**

**Paper Session 9: Data Quality and Integration I**

João Luís Cardoso De Moraes, Wanderley Souza, Luis Ferreira Pires, Luciana Tricai Cavalini and Antonio Francisco Do Prado. A Novel Architecture for Message Exchange in Pervasive Healthcare based on the use of Intelligent Agents

Ilham Outahar, Elhabib Nfaoui and Omar El Beqqali. Implementing Knowledge Management in supply chain

Messaouda Fareh, Omar Boussaid and Rachid Chahal. Semantic Metadata Mediation: XML, RDF and RuleML

Jens Lüssem and Hakim Harrach. How to make data migration processes more efficient by using TOGAF

**Paper Session 10: Big Data, Business Intelligence, Analytics I**

Hanine Mohamed, Boutkhoul Omar, Tikniouine Abdessadek and Agouti Tarik. Approach to integration SOLAP tools and Multicriteria Analysis for Spatial Decision Support

Salim Lahmiri, Mounir Boukadoum and Sylvain Chartier. Information Fusion and S&P500 Trend Prediction

Boutkhoul Omar, Hanine Mohamed, Tikniouine Abdessadek and Agouti Tarik. Integration approach of multicriteria analysis to OLAP systems: Multidimensional model

Badreddine Benyacoub. credit scoring model based on Baum-Welch method

**Paper Session 11: Cloud and Distributed Computing II**

Radhya Sahal, Sherif Khattab and Fatma Omara. GPSO: An Improved Search Algorithm for Resource Allocation in Cloud Databases

Yacine Kissoum, Ramdane Maamri and Zaidi Sahnoun. Towards Modeling and Verification of Smart Homes

Anir Benlachgar and Fatima-Zahra Belouadha. Review of Software Product Line Models Used to Model Cloud applications

Yassine Toufique, Rajaa Cherkaoui El Moursli, Mohammed Kaci, Abderrahman El Kharrim and Redouane Merrouch. A Benchmark of clinical PET using GATE simulation on the computing Grid

**Paper Session 12: Networking, sensor networks, mobile computing II**

Magdy Ahmed, Ahmed Aly and Mohamed Elderini. Maximizing Energy Utilization of Routing In Wireless Sensor Networks

Yang Chi and Dharma Agrawal. Network Locality in Wireless Networks

Lahby Mohamed, Abdellah Adib and Cherkaoui Leghris. Novel Validation Approach For Network Selection Algorithm by Applying The Group MADM

Houaidia Chiraz, Van Den Bossche Adrien, Idoudi Hanen, Val Thierry and Saidane Leila. Link Availability Aware Routing Metric For Wireless Mesh

Networks

Arres Billel, Boussaid Omar and Kabachi Nadia. Building OLAP cubes on a Cloud Computing environment with MapReduce

12:00 p.m. - 01:30 p.m.

**Lunch**

1:30 p.m. - 2:30 p.m.

**Invited speaker: Dr. Esma Aimeur**  
**Privacy and Internal Personal Data Collection**

2:45 p.m. - 04:15 p.m.

**(parallel sessions)**

**Paper Session 13: IR, Data and knowledge management II**

Ghazi Al-Naymat. GCG: Mining Maximal Complete Graph Patterns from Large Spatial Data

Mohammad Alomari. Serializable executions with Snapshot isolation and Two-Phase Locking: Revisited

Ines Berrazega and Rim Faiz. Identifying Temporal Relations between Main Events in News Articles

Sana Hamdi, Malek Ben Salem, Emna Bouazizi and Rafik Bouaziz. Management of the Real-Time Derived Data in a Distributed Real-Time DBMS Using the Semi-Total Replication Data

**Paper Session 14: BPM, Web Services, SOA II**

Hatim Guermah, Fissaa Tarik, Hatim Hafiddi, Mahmoud Nassar and Abdelaziz Kriouile. Context Modeling and Reasoning for building Context Aware Services

Boukhedouma Saida, Oussalah Mourad, Alimazighi Zaia and Tamzalit Dalila. Flexible Loosely Coupled Inter-organizational Workflows Using SOA

Hanae Sbai, Mounia Fredj and Laila Kjiri. To trace and guide evolution in configurable process models

Meriem Benhaddi, Karim Baïna and El Hassan Abdelwahed. SOA for the Masses : End Users as Services Composers

**Paper Session 15: Multimedia and Computer vision II**

Moayad Aloqaily, Fatna Belqasmi, Roch Glitho and Amin Hammad. Multiparty/Multimedia Conferencing in Mobile Ad Hoc Networks for Improving Communications between Firefighters

Fattah Zirari, Abdellatif Ennaji, Stephane Nicolas and Driss Mammass. A simple text/graphic separation method for document image segmentation

Hazar Mliki, Nesrine Fourati, Souhaïl Smaoui and Mohamed Hammami. Automatic Facial Expression Recognition System

Abderrahim Maizate and Najib El Kamoun. Enhanced Passive Clustering Based on Distance and Residual Energy for Wireless Sensor Network

**Paper Session 16: Arabic/Amazigh/Farsi/Urdu language processing II**

Fattah Zirari, Abdellatif Ennaji, Stephane Nicolas and Driss Mammass. A methodology to spot words in historical arabic documents'' ) &

Riadh Belkebir and Ahmed Guessoum. A Hybrid BSO-Chi2-SVM Approach to Arabic Text Categorization'' ) \*

Rim Koulali, Mahmoud El-Haj and Abdelouafi Meziane. Arabic Topic Detection using Automatic Text Summarisation'' \*'

Alia Morsi and Ahmed Rafea. Studying the Impact of Various Features on the Performance of Conditional Random Field-based Arabic Named Entity Recognition'' \* +

04:15 p.m. - 04:45 p.m. **Break**

04:30 p.m. - 05:30 p.m. **Poster**

## Thursday, May 30, 2013

### Fes, Hotel Fes Medina

09:00 a.m. - 10:00 a.m. **Keynote Speech 3: Cloud assurance: the notion and the issues**  
Dr. Ernesto Damiani

10:00 a.m. - 10:20 a.m. **Break**

10:20 a.m. - 12:00 p.m. **(parallel sessions)**  
**Paper Session 17: Big Data, Business Intelligence, Analytics II**

Anass Benshrir. Big Data for Geo-political Analysis: application on Barack Obama's remarks and speeches'' +&

Nawal Sael, Abdelaziz Marzak and Hicham Behja. Web Usage Mining: Data Preprocessing and Multi Level analysis on Moodle'' +\*

Fatima Ezzahra Sloukia, Mohammed El Aroussi, Hicham Medromi and Mohammed Wahbi. Bearings Prognostic using Mixture of Gaussians Hidden Markov Model and Support Vector Machine'' , '

Elmansouri Rachid, Elbeqqali Omar and Ziati Elhoussaine. Normed principal components analysis: a new approach to data warehouse fragmentation'' , +

### **Paper Session 18: Cloud and Distributed Computing III**

Hazem Morsy and Hesham El-Rewini. Adaptive Scheduling in a Mobile Ad-Hoc Grid for Time-Sensitive Computing'' - %

Rim Moussa. Benchmarking Data Warehouse Systems in the Cloud'' - -

Salek Riadi, Driss El Ghanami and Abdelilah Maach. An Efficient Burst Cloning Scheme for Optical Burst Switching over Star Networks'' (\$+

### **Paper Session 19: Networking, sensor networks, mobile computing III**

Slaheddine Chelbi, Claude Duvallet, Majed Abdouli and Rafik Bouaziz.

Multi-Hop Energy Efficient Routing Protocol Based on Data Controlling for Wireless Sensor Networks''(%%

El Khadiri Karim and Qjidaa Hassan. A low noise, high PSR low-dropout regulator for low-cost portable electronics''(%+

Abdelkader Dekdouk. Energy efficient oriented mobile learning that emphasizes energy saving awareness education''(&&

Touil Hicham, Fakhri Youssef and Benattou Mohammed. Contention Window MAC Parameters Tyning for Wireless Multimedia Sensor Networks''(&\*

### **Paper Session 20: IR, Data and knowledge management III**

Asrin Mohammadi. Building a Test Collection for Sorani Kurdish''(' \$

Rim Faiz and Sondess Missaoui. Context Filtering Process for Mobile Web Search''(' +

Faiza Belbachir, Khadidja Henni and Lynda Zaoui. Automatic detection of gender on the blogs''( )

12:00 p.m.

**Adjourn**

## **Poster Sessions**

Comparative Performance Study Between Spectral Subrratction and Discreet Wavelet Transform for Speech Enhancement''( (-

CHANNEL CAPACITY MAXIMIZATION IN MIMO-SDMA BASED COGNITIVE NETWORKS''( ) \$

Mobile Cloud Computing: Current Development And Research Challenges''( ) (

Recognition of partially occulted objects''( ) )

AutomatedSelf-healingFrameworkforService-OrientedSystems''( ) \*

A Novel Model for Document Representation''( \* &

Contactless hand detection in complex image based on data-mining process''( \* (

Context Extraction from Reviews for Context Aware Recommendation Using Text Classification Techniques''( \* )

An Efficient Wireless Sensor Network-based Water Quality Monitoring System''( \* +

Analysis and Mastering the Data Migration Challenge for SAP FS-PM System Environments''( +%

A joint Scheme for Secure and Reliable Communication in Wireless Sensor Networks''( +&

Novel Signal Representation of Descriptors Dependency in Information



Retrieval Based on Wavelet Spectral Analysis'' (+)

Toward An Efficient Arabic Part of Speech Tagger'' (+)

Toward a noun morphological analyser of standard Amazigh'' (+)

Automotive Collision Avoidance Methodologies Sensor-Based and ITS-Based'' (+\*)

An approach based holonic multi-agent systems for the integration between e-administratives services'' (, (

Robust Full On-Chip CMOS Low Dropout Voltage Regulator with Active Compensation'' (, )

Building Arabic Corpora from Wikisource'' (-)

EnvAware: Social Network for Community Environmental Awareness'' (-)