











## The 3<sup>rd</sup> International Conference on Cloud Computing Technologies and Applications – CloudTech'17

October 24-26 2017, Rabat, MOROCCO www.macc.ma/cloudtech17

## **Program**

Session		Topics	
S-I	Α	Cloud Architectures and Virtualization	
3-1	В	Big Data and applications	
S-II	Α	Cloud Security and privacy (I)	
2-11	В	Cloud Services and Applications	
S-III	Α	Cloud energy efficiency	
2-111	В	Distributed Cloud / Cloud Brokering / Edge Computing	
S-IV	Α	High Performance Computing (HPC) in/with the Cloud	
3-17	В	Cloud Security and privacy (II)	

Note		Monday, October 23 <sup>rd</sup>	Т	uesday, O	ctober 24 <sup>th</sup>	Wednesday	, October 25 <sup>th</sup>
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## **Talks**

Keynote 1	HPC Meets Cloud: Opportunities and Challenges in Designing High- Performance MPI and Big Data Libraries on Virtualized InfiniBand Clusters Dhabaleswar K. Panda, Ohio State University, USA	Tuesday 10:00 -11:00
Keynote 2	Towards Extreme Scale Computing - A System Perspective in the Cloud and Big Data Era Ching-Hsien Hsu, Chung Hua University, Taiwan	Tuesday 14:00 – 15:00
Keynote 3	Scheduling Different Types of Applications in the Cloud Eleni Karatza, Aristotle University of Thessaloniki, Greece	Wednesday 9:00 – 10:00
Keynote 4	Improving Fault Tolerance in Large Scale Cloud Data Centers through Software Defined Networking Abdelmounaam Rezgui, (C2BD) Lab, New Mexico Tech, USA	Wednesday 14:00 – 15:00
Tutorial 1	Parallel and Distributed solutions using GPU and Cloud platforms (PDGC) Sidi Ahmed Mahmoudi, University of Mons, Belgium	Tuesday 11:00 – 12:30
Invited Talk 1	<b>New research trends in IoT for Education</b> Radouane Mrabet, ENSIAS, Mohammed V University, Rabat, Morocco.	Wednesday 15:00 – 16:00
Tutorial 2	<b>Distributed computing for High-throughput biological datasets, computational biology, genomics and transcriptomics</b> Jamie Alnasir, Royal Holloway, University of London, UK	Wednesday 16:30 – 17:30
Invited Talk 2	Towards a Data-Driven Platform using IoT and Big Data Technologies for Energy Efficient Buildings Mohamed Ba khouya, IUR, Morocco	Wednesday 16:30 – 17:30

## Presentation guidelines:

- All presentations should be in English.
- The time provided for **Full** oral presentations is 15 min (presentation and discussion).
- The speakers should give their slides to the session chair before the beginning of each session.

S-I (A)	Cloud Architectures and Virtualization
	<u>Chair</u> : -Pr. Dhabaleswar K. Panda, Ohio State University, USA
	Using Branch-and-Price to maximize redundant network utilization in cloud datacenter (ID-24) Shuo Wang, Jing Li, Qiqi Wang and Hongjie Zhang
	Performance Evaluation of Container and Virtual Machine Running Cassandra Workload (ID-7) Sogand Shirinbab, Lars Lundberg and Emiliano Casalicchio
Tuesday, October 24 11:00–12:30	Cloud architecture for digital phenotyping and automation (ID-34) Olivier Debauche, Saïd Mahmoudi, Pierre Manneback, Mathieu Massinon, Nassima Tadrist, Frédéric Lebeau and Sidi Ahmed Mahmoudi
	Minimizing Biased VM Selection in Live VM Migration (ID-58) Suhib Bani Melhem, Anjali Agarwal, Nishith Goel and Marzia Zaman
	Using Cloud Solution for Medical Image Processing: Issues and Implementation Efforts (ID-10)  Mbarek Marwan, Ali Kartit and Hassan Ouahmane

S-I (B)	Cloud Security and privacy (I)
	<u>Chair</u> : -Pr. Abdellah Touhafi, VUB Brussels, Belgium
	Pairing free and implicit certificate based signcryption scheme with proxy reencryption for secure cloud data storage (ID-8) An Braeken, Placide Shabisha, Abdellah Touhafi and Kris Steenhaut
	A new cryptographic method for cloud computing (ID-12) Ahmed EL-Yahyaoui, and Mohamed Dafir Ech-chrif El Kettani
Tuesday, October 24 11:00–12:30	A Review of Big Data Processing Security in Cloud Environments (ID-19) Imene Bouleghlimat and Salima Hacini
	Performance Analysis of Intrusion Detection Systems in the Cloud Computing (ID-32) Mostapha Derfouf and Mohsine Eleuldj
	Cloud Computing: Overview and Risk Identification Based on Classification by Type (ID-1) Belbergui Chaimaa, Elkamoun Najib and Rachid Hilal

S-II (A)	Big Data and applications
	<u>Chair</u> : -Pr. Abdelmounaam Rezgui, (C2BD) Lab, New Mexico Tech, USA
	Machine Learning applications in supply chains (ID-43) Halima Bousqaoui, Said Achchab and Kawtar Tikito
Tuesday, October 24 15:00–16:30	A Smart Metering Platform Using Big Data and IoT Technologies (ID-57)  Anass Berouine, Fadwa Lachhab, Youssef Nait Malek, Mohamed Bakhouya and Radouane Ouladsine
	A Machine Learning Approach for Sentiment Analysis in the Standard or Dialectal Arabic Facebook Comments (ID-14)  Abdeljalil Elouardighi, Mohcine Maghfour, Hafdalla Hammia and Fatima-Zahra Aazi
	Towards Advanced Secure MapReduce Framework Across Untrusted Hybrid Clouds (ID-67) Amine Haouari, Mostapha Zbakh, Rachid Cherkaoui, Yassir Samadi and Najlae Kasmi
	The impact of payment delays on bankruptcy prediction A comparative analysis of variables selection models and neural networks (ID-46) Fatima Zahra Azayite and Said Achchab
	A Database for Amazigh Speech Recognition Research (AMZSRD) (ID-30) Safâa El Ouahabi, Mohamed Atounti and Mohamed Bellouki

S-II (B)	Cloud Services and Applications
` ,	<u>Chair</u> : -Pr. Jamie Alnasir, Royal Holloway, University of London, UK
	On Automated Cloud Bursting and Hybrid Cloud Setups Using Apache Mesos (ID-15) Noha Xue, Harek Haugerud and Anis Yazidi
	Toward a Meta-Model for Elasticity Management in Cloud Applications (ID-41) Saddam Hocine Hiba and Meriem Belguidoum
Tuesday	Towards a fast mutimedia search engine in the cloud (ID-38)  Mohammed Amin Belarbi, Said Mahmoudi, Ghalem Belalem and Sidi Ahmed Mahmoudi
Tuesday, October 24 15:00-16:30	Temporary Materialized Views in Cloud Data Warehouses through a Web Service (ID-33) Ettaoufik Abdelaziz and Ouzzif Mohamed
	Protecting Medical Images in Cloud Using Visual Cryptography Scheme (ID-9) Mbarek Marwan, Ali Kartit and Hassan Ouahmane
	X-ETL: a new method for designing multidimensional models (ID-11) Nawfal El Moukhi, Ikram El Azami, Abdelhak and Abdelaaziz Mouloudi

S-III (A)	Cloud energy efficiency
	<u>Chair</u> : -Pr. Mohamed Bakhouya, IUR, Morcco
	Cloud autoscaling for HTTP/2 workloads (ID-39)
	Maria Carla Calzarossa, Luisa Massari, Momin I.M. Tabash and Daniele Tessera
	An Intelligent Scheduling Algorithm for Energy Efficiency in Cloud Environment Based on Artificial Bee Colony (ID-16)  Awatif Ragmani, Amina El Omri, Noreddine Abghour, Khalid Moussaid and Mohammed
Tuesday, October 24 17:00–18:30	Rida  Energy-efficient on caching in Named Data Networking: A survey (ID-44)  Safae Rahel, Abdellah Jamali and Said El Kafhali
	Efficient Allocation of VMs in servers of Data Center to reduce energy consumption (ID-76)  Djouhra Dad and Ghalem Belalem
	A Self-Adaptive Very Fast Simulated Annealing Based on Hidden Markov Model (ID-2) Mohamed Lalaoui, Abdellatif El Afia and Raddouane Chiheb

S-III (B)	Distributed Cloud / Cloud Brokering / Edge Computing
	<u>Chair</u> : -Pr. Olivier Debauche, UMONS, Belgium
	An Innovative Approach to Interconnect Distributed Cloud based Online Labs (ID-71) Abdellah Touhafi, An Braeken, Said Ben Alla and Mostapha Zbakh
	A parallel Semantic sentiment analysis (ID-28)  Madani Youness, Erritali Mohammed and Bengourram Jamaa
Tuesday, October 24	Dynamic web service composition using and/or directed graph (ID-25) Hajar Elmaghraoui, Laila Benhlima and Dalila Chiadmi
17:00–18:30	Combination POS Taggers on Amazigh Texts (ID-50) Samir Amri, Lahbib Zenkouar and Mohamed Outahajala
	Verbal morphological Analyzer/Generator for Amazigh moods based on XFST (ID-60) Rachid Ammari, Zenkouar Lahbib and Outahajala Mohammed

S-IV (A)	High Performance Computing (HPC) in/with the Cloud
	<u>Chair</u> : -Pr. Eleni Karatza, Aristotle University of Thessaloniki, Greece
Wednesday, October 25 <sup>th</sup> 11:30–12:30	Load Balancing Between Nodes in a Volunteer Cloud Computing by taking into Consideration the Number of Cloud Services Replicas (ID-27) Sofiane Mounine Hemam, Ouassila Hioual and Ouided Hioual  External clustering validation in Big Data context (ID-64) Soumeya Zerabi and Souham Meshoul  Performance Evaluation of StarPU Schedulers with Preconditioned Conjugate Gradient Solver on Heterogeneous (Multi-CPUs/Multi-GPUs) Architecture (ID-74) Najlae Kasmi, Mostapha Zbakh, Yassir Samadi, Rachid Cherkaoui and Amine Haouari  Performance prediction using support vector machine for the configuration of optimization algorithms (ID-6) Abdellatif El Afia and Malek Sarhani

S-IV (B)	Cloud Security and privacy (II)
	<u>Chair</u> : - Pr. Claude Tadonki, MINES ParisTech, France
Wednesday, October 25 <sup>th</sup> 11:30–12:30	Smart Pattern Authentication System for Cloud Consumers (ID-54) Abdelwahhab Satta and Sihem Mostefai  DDoS Attack Detection using Machine Learning Techniques in Cloud Computing Environments (ID-59) Marwane Zekri, Said El Kafhali, Noureddine Aboutabit, and Youssef Saadi  A New Technique Ensuring Privacy in Big Data: Variable t-Closeness for Sensitive Numerical Attributes (ID-61) Zakariae El Ouazzani and Hanan El Bakkali  A secure virtualization architecture based on a nested Nova hypervisor (ID-68) Hala Zineb Naji and Mostapha Zbakh

	Poster session
	A Cloud-based RFID for VANET Access filtering (ID-17) Melaouene Noussaiba, Elmakfalji Chaimae and Romadi Rahal
	Survey: Risk assessment models for cloud computing: evaluation criteria (ID-26) MANNANE NADA, BEN CHARHI Youssef, BOULAFDOUR Brahim and REGRAGUI Boubker
	A framework for Big Data analytics in Secure Network of Video Surveillance Systems Based on Images Indexation (ID-52) Abderrahmane EZ-ZAHOUT and Jawad OUBAHA
Wednesday,	FADETPM: Novel Approach of File Assured Deletion Based on Trusted Platform Module (ID 53) IGARRAMEN Zakaria and HEDABOU Mustaha
October 25 <sup>th</sup> 10:30 – 11:30	Solid-Flow: A Flow Rules Security Mechanism for SDN (ID-63) Youssef Qasmaoui and Abdelkrim Haqiq
	Towards conflicts prevention among privacy policies: A comparative study of major privacy laws and regulations for healthcare (ID-70) Souad Sadki, Hanan El Bakkali and Mohammed Akhttab
	Context-Aware Routing Protocol based on PSO for Mobile WSN (ID-72) Asmae El ghazi, Zineb Aarab and Belaid Ahiod
	Issues and Threats of Data stored in Cloud (ID-73) Maryem Berrezzouq and Abdellatif Elghazi
	An NLP based text-to-speech synthesizer for Moroccan Arabic (ID-22) Rajae Moumen, Raddouane Chiheb, Rdouan Faizi, Abdellatif El Afia