The 10th International Wireless Communications & Mobile Computing Conference

International Green Cloud Computing Workshop (IGCC 2014)

IWCMC 2014 Website: http://iwcmc.org/2014/

SUBMNISSION LINK: https://edas.info/newPaper.php?c=14357

Hilton Nicosia, Cyprus, August 4-8, 2014

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Local sponsor: Frederick University, Cyprus

Scope:

Cloud Computing (CC) has become a powerful platform for delivering various cloud offerings as IT Services, examples of such offerings include software cloud, application cloud, infrastructure cloud, and business cloud. Additionally, Cloud Computing is evolving as a platform for providing services. CC provides flexibility, scalability, efficiency, and performance. It is service oriented and provides virtualized and dynamic/distributed computing environments as it is a natural evolution of distributed computing and of the widespread adoption of virtualization and at times Service-Oriented Architectures (SOA.) In this platform, IT capabilities and resources are provided as services that can be accessed via the Intranets/Internet. CC is accessible without requiring detailed knowledge of the underlying technology. One of the characteristics of Cloud computing is that it is a metered service (pay-as-you-go pricing), thereby consumers can avoid big investments in their own/dedicated IT infrastructure. However, CC also poses challenges in the form of privacy, security, interoperability, network latency, supportability, and high energy consumption. CC utilizes modern data centers for hosting a variety of applications. However, Cloud/Virtualized Data Centers (VDCs) consume excessive amount of energy and this trend of increased consumption is continuing. Hence, data centers are expensive to operate/maintain and are environmentally inimical as huge carbon footprints are incurred as result of need to power and cool the numerous servers/storage systems hosted in these data centers. An end to end effort is required to strengthen the energy efficiency of the hardware/systems that is well represented research area with much needed focus steered towards software/algorithms. The goal of this annual workshop is to attract researchers, practitioners, developers, users, students, and industry business leaders in order to help define and shape cloud computing strategy and directions and steer towards Green Cloud Computing environments. In order to achieve this, work in several areas of interests would need to converge including, but not limited to research area such as virtualization, cloud computing management and service creation tools, CC applications/realizations, mobile CC applications, big data, web services, data mining, systems architecture, privacy, security, CC standards/specifications, CC integration, high performance computing, services research, CC QoS/QoE, Green Cloud Data Centers, Green/Sustainable Software, Green Cloud Applications, Cloud Pricing and other emerging/related areas.

Accepted papers will be published in the IEEE IWCMC 2014 proceedings and will be included in the IEEE Xplore.

Topics of interest include, but are not limited to:

- Fundamentals of Cloud Computing
- Fundamentals of Green Computing/Green Cloud Computing
- Green computing, software, and algorithm requirements engineering, architecting and design methods, Service-Oriented Architectures
- Best practices Driving energy efficiency and sustainability
- Monitoring, verification and validation of Green Software/Algorithms
- Tools for Green decision making and development
- Business models for green software
- (Green/Energy Aware) Hardware, Middleware, and IT architecture

- (Green/Energy Aware) Architectural/programming cloud models/Green Design patterns
- Big Data Platforms/Storage Management/Architectures of Big Data on (Green) Cloud
- Large Scientific Workflow Supporting Big Data in Cloud, Transactional Models
- Data Mining and Analytics/Scientific Data Management
- (Green/Energy Aware/Efficient) Data Center Architectures
- (Green/Energy Aware) Data storage, scheduling, auditing, and monitoring
- Virtualization Techniques
- Resource Provision/scheduling and Management, Resource/Energy Management and Performance and optimization
- Web-Based Computing and Real-Time and Multimedia Systems
- (Green/Energy Aware/Efficient) Networking Design, Management, Operation, and Protocols
- Green Wireless and Wired Access Networks/Network Users
- High Availability, scalability and Reliability/Fault tolerance (Green) Cloud Computing/Modeling and Performance Evaluation
- Trust, Privacy, Security, risk, and Compliance Management of Private/Public, Mobile Clouds, and Hybrid Clouds
- Cloud Configuration, and Capacity Management /Cloud Migration
- Resource Scheduling/SLA for Big Data on (Green) Cloud/(Green) Cloud Quality Management
- Green Computing case studies/ (Green) Cloud use case studies
- Challenges facing Green Cloud/Data Centers/Software Industry
- Tradeoff Between Sustainability/Energy Efficiency and Traditional Quality Requirements/ Green IT metrics
- Data Centers/Servers/Storage and Networking Systems Power Consumption Reduction Methods
- Innovative Cloud Applications and Experiences

Submission Guidelines:

Prospective authors are invited to submit original technical papers—up to 6 pages of length, using the EDAS link https://edas.info/newPaper.php?c=14357 for possible publication in the IWCMC 2014 Conference Proceedings, which will be included in the IEEE Xplore. Selected papers will further be considered for possible publication in three special issues in the following Journals:

1. Wiley Journal of Wireless Communications and Mobile Computing (WCMC) http://www3.interscience.wiley.com/journal/76507157/home
2. The International Journal of Sensor Networks (IJSNet) http://www.inderscience.com/browse/index.php?journalCODE=ijsnet
3. The International Journal of Autonomous and Adaptive Communications Systems (IJAACS): www.inderscience.com/ijaacs

Note: There will be best paper award, best Symposium award and best Workshop award.

Important Dates:

Submission:	January 15, 2014
Acceptance notification:	April 15, 2014
Camera-ready paper submissions:	April 30, 2014
Registration deadline for authors:	May 15, 2014

Workshop Chair:

Dr. Safi Faizullah, HP/Visiting Scholar/Adjunct Professor, Rutgers University, USA

Workshop Co-Chairs:

Dr. Imdadullah Khan, Department of Computer Science, Umm Al-Qura University, Saudi Arabia

TPC Members (more TPC members will be added later):

Dr. Safi Faizullah, HP - Visiting Scholar/Adjunct Professor, Rutgers University, USA

Dr. Imdadullah Khan, Department of Computer Science, Umm Al-Qura University, Saudi Arabia

Dr. Amr Elmasry, Department of Computer Engineering and Systems, Alexandria University, Egypt

Dr. Samia M. Souissi, Department of Computer Science, Umm Al-Qura University, Saudi Arabia

Dr. Iman Elghandour, Department of Computer and Systems Engineering, Alexandria University, Egypt

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Dr. Amin Abdulghani, Networking Industry, USA

Shakeel Butt (Ph.D. Candidate), Nvidia Corp, USA