News from SCS Networks

AUSTECH 2015, THE FIRST AUST INTERNATIONAL CONFERENCE IN TECHNOLOGY

Mamadou Kaba Traoré
Department of Mathematics & Computer Science
African University of Science & Technology (AUST)

The African University of Science and Technology (AUST) International Conference in Technology 2015 (AUSTECH’15) was conducted October 12-14, 2015, on AUST campus at Abuja, Nigeria. AUSTECH is an annual event by AUST which focuses on current developments in Engineering technologies, scientific and industrial applications for development in Sub-Saharan Africa. It has a multi-Conference format, with 3 symposia reflecting the core technological areas developed at AUST:

- Petroleum Engineering Symposium (PES), chaired this year by D. OGBE, AUST (Nigeria).
- Materials Science and Engineering Symposium (MSES), chaired this year by P. ONWUALU, AUST (Nigeria).
- Computer Science Symposium (CSS), chaired this year by M.K. TRAORE, AUST and Blaise Pascal University (France), who also chaired the overall multi-conference.

AUSTECH’15 program included a world-class selection of invited speakers and panels. It also promoted a Ph.D. Colloquium and Poster sessions, fora where opportunity was given to students to showcase their work in progress and link with their peers. Many people deserve credits for the success of AUSTECH’15. This includes the organization teams in the symposia and the overall multi-
conference, the authors, the reviewers, the panelists, and attendees who contributed to memorable cross-fertilization. The conference has been sponsored by the ACBF (African Capacity Building Foundation).

A special emphasis has to be done here on the Computer Science Symposium, which focused on Theories, Technologies and Applications of Computational Systems for Development in Sub Saharan Africa. 11 major contributors were selected to give an invited talk and to provide a chapter for the handbook to be produced. The 5 emerging themes addressed for their very significant impact on development in Sub Saharan Africa were the following:

**Theme 2: MOBILE & TELECOM**
- Advances in Video Production, Application Generation and Telecommunications, contribution of Michael Adeyeye, University of West Australia.

**Theme 3: COMPUTER GRAPHICS**
- Application of Scientific Visualization Tools to Medical Imaging – a Demonstration using 3D Slicer, contribution of Kola Babalola, Manchester Metropolitan University, UK.

**Theme 4: SYSTEMS OF SYSTEMS**
- Multidisciplinary, Interdisciplinary, and Transdisciplinary Federations in Support of New Medical Simulation Concepts – Harmonics for the Music of Life, contribution of Andreas Tolk, MITRE Corp., USA.

**Theme 5: COMPUTATIONAL SCIENCE**
- Applying Scientific Computing to Development, contribution of Omolulu Akin-Ojo, African University of Science and Technology, Nigeria.
- Nanotechnologies, Biotechnologies, Information Technology, Cognitive Science (NBIC) and Simulation, contribution of David Hill, Blaise Pascal University, France.

These contributions have to appear in a handbook on Theories, Technologies and Applications of Computational Systems for Development. For more, see the conference Website at [http://conference.aust.edu.ng/](http://conference.aust.edu.ng/)
Aims and Scope
The Summer Simulation Multi-Conference 2016 (SummerSim’16) is a combination of the Summer Computer Simulation Conference (SCSC) (48th edition), the International Symposium on Performance Evaluation of Computer and Telecommunications Systems (SPECTS), and International Conference on Bond Graph Modeling and Simulation (ICBGM). SummerSim is SCS’s premier international conference in cooperation with ACM SIGSIM. The conference focuses on modeling and simulation, tools, theory, methodologies and applications and provides a forum for the latest R&D results in academia and industry. This year’s focus is on the Role of Simulation Tools, Methodologies and Technologies in Scalable and Interoperable Cyber-Physical Systems and Interdisciplinary Issues for a Connected World. We encourage you to take this opportunity to experience the tutorials, tracks, and workshops that will be available.

Authors of accepted papers are expected to attend the conference, present their work to their peers, transfer copyright, and pay a conference registration fee at the time their camera-ready paper is submitted. All papers (unless otherwise noted) will be included in the conference proceedings and archived in both the SCS digital library and the ACM Digital Library, and will be indexed in DBLP and SCOPUS.

A selected group of the best papers of SummerSim’16 will be invited to be published in a Special Issue of the SIMULATION journal (Transactions of the Society for Modeling and Simulation International). All authors are encouraged to submit extended versions of their papers to the Special Issue, according to the guidelines that will be posted on the webpage.

Deadlines

**Summer Computer Simulation Conference (SCSC)**
- Tutorial Acceptance: March 14, 2016
- Submission of Full Papers: March 14, 2016
- Paper Acceptance: April 27, 2016
- Submission of Work in Progress Papers: March 28, 2016

- Invited session Proposals: February 8, 2016
- Tutorial Acceptance: March 14, 2016
- Submission of Full Papers: March 7, 2016
- Paper Acceptance: April 27, 2016
- Submission of Work in Progress Papers: March 28, 2016
- Work in Progress Acceptance: April 17, 2016
- Submission of Camera Ready Copies and Copyright forms: May 22, 2016

**International Conference on Bond Graph Modeling and Simulation (ICBGM)**
- Submission of Full Papers: March 1, 2016
- Paper Acceptance: April 15, 2016
- Submission of Camera Ready Copies and Copyright Forms: May 15, 2016

**Organizing Committee**
- SummerSim General Chair: Floriano de Rango, University of Calabria, Italy (derango@dimes.unical.it)
- SummerSim General Co-Chair: José Luis Risco Martín, Complutense University of Madrid, Spain (jlrisco@ucm.es)
- SummerSim Program Chairs: Andrea D’Ambrogio, University of Rome “Tor Vergata”, Italy (dambro@uniroma2.it); Gabriela Nicolescu, Politechnique, Montreal, Canada, (gabriela.nicolescu@polymtl.ca)

**Topics of interest**
Topics of interest are listed below but are not limited to listed references. All contributions related to simulation and modeling of problem through simulation tools or modeling techniques in different application areas where it is possible to focus on the contribution given through the use of simulation are welcome.

- Agent-Directed Simulation
- Computer Graphics for Simulation
- Cyber M&S, Ranges, and Tools
- Emergency Management Simulation
- Grand Challenges in Modeling and Simulation
- Modeling and Simulation for Cyber Security and Assessment
- Modeling and Simulation in Energy Systems Integration and Smart Grid
- Modeling and Simulation for Environmental Systems
- Modeling and Simulation for Intelligent, Adaptive and Autonomous Systems
- Bio-Medical and Population Modeling
In addition to our 2016 theme, the SIW is focused on three core tracks:

1. Acquisition Lifecycle and Technology Transfer
   - Information that provides guidance on the selection and use of M&S standards and practices to support the Acquisition Lifecycle.

2. Services, Processes, Tools, and Data
   - Technologies, frameworks, and methodologies that provide service or support for modeling and simulation.

3. M&S Specialty Applications
   - Simulation technologies applied for a specific purpose such as augmented reality, medical, cyber security, space, human behavior, system/vehicle or weapon product development, IoT, LVC interoperability, and command and control systems.

One of the major components of the SIW event is SISO University. Through tutorials offered at SIW, subject matter experts in their field provide relevant and fresh training to keep our community sharp in the arena of M&S as it relates to interoperability, reuse and systems engineering.

Key Dates:
8 Apr 2016: Abstracts Due Electronically
2 May 2016: Abstract Acceptance Notification
1 July 2016: Papers Due Electronically
22 July 2016: Paper Acceptance Notification
5 Aug 2016: Final Paper Revisions Due
5 Aug 2016: Initial PowerPoint Presentations Due
26 Aug 2016: Final PowerPoint Presentations Due
11 - 16 Sept 2016: 2016 Simulation Innovation Workshop – Orlando, Florida

The 2016 SIW provides an excellent opportunity for M&S professionals, entrepreneurs and visionaries to connect and collaborate on new innovations and in the development of standardization products that capture and formalize best practices, lessons learned, and professional experiences. Our common goal is to advance the use of models, simulations, and associated data to better support the needs of communities such as acquisition, analysis, cyber, experimentation, intelligence, medical, planning, test and evaluation, training, and virtual games.

Conference Tracks:
- Acquisition Lifecycle and Technology Transfer Track
- The Acquisition Lifecycle and Technology Transfer (ACQ) Track focuses on the promotion and use of M&S standards and practices that support the acquisition lifecycle. We solicit papers that address the identification, application, and value-added benefits of M&S for analysis, research and development, test and evaluation, training, asset management, and system lifecycle strategies. Papers that demonstrate specific applications to specific systems and the benefits of M&S to those systems are preferred.
- Services, Processes, Tools, and Data Track
- The Services, Processes, Tools, and Data (SVCS) Track encompasses technologies, frameworks, and methodologies to provide services that support models, simulations, and associated data. The track is interested in both processes and their implementations/tools in areas of: distributed simulation process; verification, validation, and accreditation;
communication infrastructure; and simulation and environment reuse. The SVCS track focuses on evolving a systems engineering solution to simulation problems across the spectrum from design, through implementation and deployment, to validation, use, and reuse.

• M&S Specialty Applications Track

The M&S Specialty Applications (SPEC) rack is concerned with using simulation technologies for a specific purpose such as: LVC interoperability; augmented reality; Internet of Things (IoT) integration, system, vehicle, or weapon product development; space travel; understanding and prediction of human behavior; and design of interoperable command and control systems. Present thrust areas center on the application of M&S for Cyber Warfare, Medical, Space, IoT, and Future Training, but the forum is not limited to these topics. We solicit papers that address the use of Modeling and Simulation in these or other specific applications.

Submission Instructions:

We invite you to submit an abstract that aligns with any of the three core tracks, and are especially interested in papers centered on this year’s theme. Please submit your abstract, paper and presentation to the SISO web site at www.sisostds.org.