# PROCEEDINGS OF THE 2012 INTERNATIONAL CONFERENCE ON SECURITY & MANAGEMENT

# SAMS

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#### **Foreword**

It gives us great pleasure to introduce this collection of papers to be presented at the 2012 International Conference on Security and Management (SAM'12), July 16 through 19, 2012, at Monte Carlo Resort, Las Vegas, USA.

The Academic Co-Sponsors, Corporate Co-Sponsors, Co-Sponsors At-Large and Organizers of this year's conference include (separated by semicolons):

Bioinformatics & Computational Biology Program, George Mason University, Virginia, USA; Biomedical Cybernetics Laboratory, HST of Harvard University and MIT, USA; Minnesota Supercomputing Institute, University of Minnesota, USA; Center for Cyber Defense, NCAT, USA; Argonne's Leadership Computing Facility of Argonne National Laboratory, Illinois, USA; The Center for Advanced Studies in Identity Sciences (CASIS: NC A&T, Carnegie Mellon, Clemson, UNC Wilmington), USA; Knowledge Management & Intelligent System Center (KMIS) of University of Siegen, Germany; Intelligent Cyberspace Engineering Lab., ICEL, Texas A&M University, Commerce, Texas, USA; UMIT, Institute of Bioinformatics and Translational Research, Austria; Hawkeye Radiology Informatics, Department of Radiology, College of Medicine, University of Iowa, Iowa, USA; The International Council on Medical and Care Compunetics, Europe; US Chapter of World Academy of Science (http://www.world-academy-ofscience.org/); Supercomputer Software Department (SSD), Institute of Computational Mathematics & Mathematical Geophysics, Russian Academy of Sciences, Russia; International Society of Intelligent Biological Medicine, USA; NDSU-CIIT Green Computing and Communications Laboratory, USA; Medical Image HPC & Informatics Lab (MiHi Lab), University of Iowa, Iowa, USA; High Performance Computing for Nanotechnology, USA; Manx Telecom, Europe; Computer Science Research, Education, and Applications Press; World Academy of Biomedical Sciences and Technologies; HoIP Telecom, Europe; Super Micro Computer, Inc., San Jose, California, USA; Intel Corporation; Hodges Health, UK; and OMG TM. In addition, a number of university faculty members and their staff (names appear below and also on the cover of the proceedings), several publishers of computer science and computer engineering books and journals, chapters and/or task forces of computer science associations/organizations from 6 countries, and developers of high-performance machines and systems provided significant help in organizing the conference as well as providing some resources.

An important mission of WORLDCOMP (a federated congress to which this conference is affiliated with) includes "Providing a unique platform for a diverse community of constituents composed of scholars, researchers, developers, educators, and practitioners. The Congress makes concerted effort to reach out to participants affiliated with diverse entities (such as: universities, institutions, corporations, government agencies, and research centers/labs) from all over the world. The congress also attempts to connect participants from institutions that have **teaching** as their main mission with those who are affiliated with institutions that have **research** as their main mission. The congress uses a quota system to achieve its institution and geography diversity objectives."

The program committee would like to thank all those who submitted papers for consideration. About 42% of the submissions were from outside the United States. Each paper was peer-reviewed by at least two experts in the field (occasionally by three) for originality, significance, clarity, impact, and soundness. The only exception to the above evaluation process was for papers that were submitted directly to chairs/organizers of approved sessions/workshops; in these cases, the chairs/organizers were responsible for the evaluation of such submissions.

We are very grateful to the many colleagues who helped in organizing the conference. In particular, we would like to thank the members of the SAM'12 Program Committee who we hope will offer their help again in organizing the next year's conference (SAM'13). The SAM'12 Program Committee members were:

- Dr. Iftikhar Ahmad, King Saud University, Saudi Arabia
- Prof. Wasim Al Hamdani, Professor (Program Co-Chair, SAM'12), Department of Computer Technology Sciences, Kentucky State University, Frankfort, Kentucky USA

- Prof. Nizar Al Holou, Chair, Department of Electrical and Computer Engineering, University of Detroit Mercy, Detroit, Michigan, USA
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- Dr. Alok Tongaonkar, Researcher, Narus Inc., USA
- Dr. Gregory Vert, Texas A&M University, Texas, USA
- Dr. Montri Wiboonrat, Khon Kaen University, Bangkok, Thailand

We express our gratitude to keynote, invited, and individual conference/tracks and tutorial speakers - the list of speakers appears on the conference web site. We would also like to thank the followings: UCMSS (Universal Conference Management Systems & Support, California, USA) for managing all aspects of the conference; Dr. Tim Field of APC for managing the printing of the proceedings; and the staff of Monte Carlo Resort in Las Vegas for the professional service they provided. Last but not least, we would like to thank the Co-Editors and Associate Co-Editors of SAM'12: Prof. Kevin Daimi, Prof. Hamid R. Arabnia, Dr. Wasim Al-Hamdani, Dr. Christopher Bolan, Prof. Michael R. Grimaila, Prof. George Markowsky, Dr. Linda Markowsky, and Ashu M. G. Solo.

We present the proceedings of SAM'12.

Steering Committee, WORLDCOMP 2012 http://www.world-academy-of-science.org/worldcomp12/ws

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