

Sustainability Development with Information Science and Technology (IST)

Objectives

The objectives of the symposium include:

- 1) Identifying best practices in the use of information science and technology, including the Internet, intelligent systems, data management tools, and network systems in environmental management, energy efficiency, cleaner technologies, improved resource management and education.
- 2) Analyzing impact of technologies on health and welfare.
- 3) Identify collaboration opportunities among computer scientists and engineers in supporting continuous growth and progress of health and welfare.

Scope

This symposium will solicit high quality theoretical as well as practical work on a broad range of computer and information science and engineering that support global sustainability issues including environmental management, energy efficiency, cleaner technologies, improved resource management and education. The areas of interest include but are not limited to:

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| <ol style="list-style-type: none"> 1) BioInformatics 2) Internet Computing 3) Wireless Networks 4) Ubiquitous Computing 5) Middleware 6) Real-time and Embedded Systems 7) Software System Design | <ol style="list-style-type: none"> 8) Virtualization 9) Database Systems 10) Sensor Networks 11) Multimedia Systems 12) Computer Security 13) Computer Graphics and Visualization |
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The presentations should focus on one or more of the three symposium objectives (1-3) listed above.

Symposium Chair & Co-Chairs	
United States	Korea
<ul style="list-style-type: none"> • Jihie Kim (Chair) University of Southern California jihie@isi.edu • Taekjin Kwon Telecordia tkwon@research.telcordia.com 	<ul style="list-style-type: none"> • Hyeonsang Eom SNU hseom@cse.snu.ac.kr • Taisook Han KAIST taisook.han@gmail.com

Topics and Session Chairs		
Title	Session Chair	Topic
Network Systems	Kang-Won Lee (IBM Research) kangwon@us.ibm.com	Networks for Global Sustainability
Artificial Intelligence and Computer Vision	Yoonsuck Choe (Texas A&M) choe@cs.tamu.edu	Artificial Intelligence and Artificial Life for Global Stability
Database and Multimedia Systems	Dongwon Lee (Penn State University) dongwon@psu.edu	Management of Welfare and Health Information
Distributed Systems and Security	Taek Jin Kwon (Telecordia) tkwon@research.telcordia.com	Global Security
Architecture and Software Systems	Kyung Dong Ryu (IBM Research) kryu@us.ibm.com	Sustainable Software for Global Sustainability
IST Opportunities for Global Sustainability	Young B. Choi (James Madison University) choiyb@jmu.edu	IST Opportunities in Welfare, Health and Education
E-Science Research for Global Sustainability		

Panel Session	
Title:	Collaboration Opportunities Among Computer Scientists and Engineers in Addressing Sustainability Issues
Panelists	Kane Kim (University of California, Irvine) khkim@uci.edu Se-June Hong (IBM Research) sjhong@us.ibm.com Kang G. Shin (University of Michigan) kgshin@eecs.umich.edu Insup Lee (University of Pennsylvania) slee@cis.upenn.edu
Moderator	Sang Hyuk Son (University of Virginia) son@cs.virginia.edu

Poster Session	
Theme	Innovative Ideas on IST Applications for Global Sustainability

Candidate Publication Venues

Journal Title: JUCT, *International Journal of Ubiquitous Convergence Technology*,
(<http://www.juct.org>)

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