Call for Papers
Data Storage Technology and Applications Symposium, ICNC 2013

San Diego, California, Jan. 28-31, 2013
http://www.conf-icnc.org/

Symposium Co-chairs:

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Scope:

The Data Storage Technology and Applications Symposium will focus on topics related to all aspects of data storage systems, including signal processing, coding, data storage systems and architectures, and security. Of special interest are papers reporting on novel and practical solutions for existing architectures as well as emerging technologies. To ensure complete coverage of the advances in data storage technologies, the Data Storage Technology and Applications Symposium presents original contributions in, but not limited to, the following areas:

- Signal processing and coding techniques for magnetic recording systems, including timing recovery, equalization, detection and error correction.
- Physical layer design/architecture of interface of data storage systems and high speed serial link communication systems such as SAS, SATA and PCI express and serdes.
- Channel characterization of emerging nonvolatile technologies such as NAND flash and phase change memory.
- Coding and information theory techniques for new non-volatile memories, including algebraic and graph-based codes (such as BCH and LDPC codes) and their performance evaluation.
- Investigation of endurance and wear-leveling for non-volatile memories.
- System-on-chip (SOC) architecture and optimization.
- Data storage systems and architectures for cloud computing.
- Analysis of cost versus performance, power issues for data storage centers.
- Architectures for disk arrays.
- Coding, deduplication, compression and data security for storage systems.
- Storage management and inter-operability.
- Data compression for digital storage, including audio and video signal processing and coding methods.
- Measurement, testing, and performance optimization of storage systems.
- New concepts for data storage systems.

Submission Guidelines:

Please follow the author instructions at http://www.conf-icnc.org/2013/author.htm
Direct paper submission weblink of this symposium can be found at http://www.conf-icnc.org/2013/cfp.htm

Co-chair biographies:

Lara Dolecek received her B.S., M.S. and Ph.D. degrees in 1999, 2004 and 2007, respectively, all in Electrical Engineering and Computer Sciences (EECS) from the University of California, Berkeley. She also received an M.A. degree in Statistics in 2007 from Berkeley. For her dissertation in novel coding methods for highly reliable communications and data storage systems she received the David J. Sakrison Memorial Prize from the EECS Department at Berkeley for the most outstanding doctoral work in 2007. Prior to joining University of California, Los Angeles as an Assistant Professor, she was a post-doctoral researcher at the Massachusetts Institute of Technology. Prof. Dolecek received the NSF CAREER Award in 2012. She is a technical consultant for several data storage companies, has served on several technical program committees, including IEEE Globecom, IEEE International Conference on Communications and IEEE International Conference on Computing, Networking and Communications, and IEEE Turbo Coding Symposium. Prof. Dolecek is an active member of the IEEE ComSoc Data Storage Technical Committee and she is scheduled to chair the IEEE Globecom Data Storage Track in 2014.

Brian M. Kurkoski was born in Portland, Oregon. He received the B.S. degree from the California Institute of Technology in 1993, and then worked in industry for several years. He received the M.S. and Ph.D. degrees from the University of California San Diego in 2000 and 2004, respectively. He was at the University of Electro-Communications in Tokyo, Japan, first as a postdoctoral researcher from 2004 to 2006, and then as an Associate Professor from 2007 to 2012. He is currently an Associate Professor at the Japan Advanced Institute of Science and Technology (JAIST). Since 2010, he has been an associate editor for IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences. He was an organizer of the Workshop on Coding for Flash Memories (Japan) in 2010 and 2012 and he is scheduled to chair the IEEE ICC Data Storage Track in 2014. His research interests include coding theory, information theory and communication theory.