

Call for Papers: Workshop on Self-Adaptive Networking at SASO 2010

Self-organizing communication networks are often built with explicit protocols (e.g., DHCP). Organization is a primary goal and so it is easy to recognize these systems. Self-adaptive networks often have their adaptation mechanism built into a protocol as a component. Common examples include congestion avoidance in TCP and collision detection in Ethernet. Through this workshop, we plan to explore the ways in which self-adaptation is currently used in networking (often without being recognized) and how ideas from the self-* community can be applied to perform these functions with a principled approach.

This workshop will bring together researchers from different areas such as wireless networking, quality-of-service, networking applications, intelligent networking, and self adaptive technology to gain broad insights into specific research issues related to self-adaptive networking and to foster discussions about ongoing research, establish directions for future research and collaborations, and identify best practices for applying self-adaptive techniques to networking. Specific topics of interest include:

- Dynamically Configurable Protocol Stacks
- Meta-level control and monitoring of networks
- Use of feedback mechanisms in network operations
- Self-explaining network systems
- Self-adaptive, self healing or autonomic networks
- Centralized versus distributed network control
- Measurement of network properties in support of self evaluation
- The role of state abstraction in network self evaluation
- Computational models of network performance
- Adaptive routing, queuing, and scheduling
- Learning in adaptive networks
- Integration of self-adaptive techniques in self-organizing networks
- Mobile adaptive protocols
- Protocol composition
- Dynamically reprogrammable switches
- Policy-based Network Management systems used to build self-adaptive networks
- Energy-aware networks
- Use of homeostasis and highly optimized tolerance (HOT) techniques

Important Dates

Submission of contributions to workshops: July 12, 2010

Workshop papers acceptance notification: August 6, 2010

Early registration deadline: August 13, 2010

Camera Ready Copy: August 20, 2010

SAN Workshop at SASO 2010 in Budapest, Hungary: September 27, 2010

Submission Instructions:

We encourage the submission of high quality, original papers that are not submitted for publication elsewhere. All submissions should be 8 pages formatted per <http://www.inf.u-szeged.hu/saso10/index.php?menu=submission>. Short position papers are also accepted. Submissions should be emailed to all three chairs (rladdaga@bbn.com, salex@research.telcordia.com, and jms@cis.upenn.edu) by the deadline.

Please see <http://www.argreenhouse.com/san10/> for additional workshop information. Please see <http://www.inf.u-szeged.hu/saso10/index.php> for more information on SASO 2010.

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Marcos K. Aguilera, Microsoft

Jon Crowcroft, Cambridge

Karen Haigh, BBN

Gary Minden, U Kansas

Greg Troxel, BBN

Scott Alexander, Telcordia²

Saleem Bhatti, U St. Andrews

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Chris Ramming, Intel

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Jonathan Smith, UPenn¹

Ritu Chadha, Telcordia

Joseph Evans, U Kansas

Yun Mao, AT&T Labs - Research

Steve Schwab, Cobham

Steve Zabele, BBN

¹Organizing Committee Member, ²Organizing Committee Chair (salex@research.telcordia.com)