DRCN | 2015

11th International Conference on the
Design of Reliable Communication Networks

March 25-27, 2015   Kansas City, USA   www.drcn2015.org

CALL FOR PAPERS

DRCN is a well-established annual forum for scientists, engineers, designers and planners from industry, government and academia who have interests in the reliability and availability of communication networks and services. The conference covers topics from equipment and technology for survivability to network management & public policy, through theory and techniques for survivable and robust networks and application design. The aim of the conference is to bring together people from industry, government and academia in those disciplines in a lively forum.

Extended version of accepted papers are targeted for consideration in a special issue of Springer's Journal of Network and Systems Management.

The 11th DRCN edition will be held in Kansas City, Missouri, USA. The conference will be enriched by a set of tutorials and invited talks. We seek papers that address theoretical, experimental, systems-related and regulatory issues in the area of dependability and survivability of communication networks, end-systems and infrastructure.

Topics

Network Design and Operational Aspects
- Survivability of optical and multi-layer networks
- Recovery techniques for IP routing and Layer-2 switching
- Resilient wired access networks
- Reliability of wireless access and mesh networking
- Dependability of mobile networks
- Network reliability and dependability in cloud computing and grid networks
- Reliability and recovery of Software-Defined Networks (SDN) and Network (Function) Virtualization (NFV)
- Self-healing and autonomic networks
- Survivability Content Delivery Networks (CDN) and Information-Centric Networks (ICN)
- Fault management, monitoring, and control
- Resilience of multi-domain connections in the Internet
- Management of survivable networks
- Green Networking and reliability
- Robust design of smart grid

Theory and Modeling
- Network reliability analysis
- Methods and theory for survivable network and systems design, analysis and operation (including scalability and complexity)
- Planning and optimization of reliable networks, systems, and services
- Simulation/emulation techniques for network resilience
- Modeling, design, and analysis techniques for integrated cyber security and survivability
- Network modeling and security for distributed cyber-attack detection and identification in communication networks

Resiliency of Network Services
- Reliability requirements and metrics for individual users, businesses, and the society
- Restoration of services under various types of failures
- Network coding and reliability
- Service differentiation based on recovery methods
- Dependability of networked applications
- Recovery of overlay and peer-to-peer networks
- Application and service-specific survivability techniques
- Reliability and resilience of data centre networks
- Robustness of compound services

Broad Context
Reliability requirements and metrics for individual users, businesses, and the society
- Communication networks as an element of critical infrastructures
- Public policy issues for survivability and resilience
- Standardization of network resilience and reliability
- Network resilience combined with economics and commercial issues
- Quality of experience and network survivability
- Dependability and energy consumption trade-offs
- Risk assessment formalisms and measurement caused by cyber-attacks on communication networks
- Risk and reliability in the Internet and enterprise networks
- Vulnerability analysis to natural disasters or physical attacks
- Robust design against natural disasters or attacks
- New and emerging threats

Deadlines

Submission of papers for review	November 15, 2014
Acceptance notifications	January 5, 2015
Camera-ready papers due	January 19, 2015
Tutorial sessions	March 24, 2015
Start of the conference	March 25, 2015

Guidelines

All submissions should be written in English with a max. paper length (all included) of 8 double-column printed pages (10-point font) including figures. All papers must be formatted according to the IEEE manuscript template for conference proceedings and submitted via EDAS. At least 1 author of accepted papers must be registered to the conference as presenter in order to appear in the proceedings.