

# 15th International Conference on the Design of Reliable **Communication Networks**

March 19-21, 2019 Coimbra, Portugal http://drcn2019.inescc.pt





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Since its creation in 1998, The International Conference on the Design of Reliable Communication Networks (DRCN) has become over the years a well-established forum for scientists from both industry and academy who have interest in reliability and availability of communication networks, and related resilience topics. The aim of the conference is to bring together people from various disciplines, ranging from engineering of survivable equipment and network technologies to network management and monitoring, through methods and models for survivable and robust network design. As such, DRCN is a well-known forum for presenting excellent results and new challenges in the field of reliable communication networks and services.

We are pleased to invite you to contribute and participate in the 15<sup>th</sup> edition of DRCN in Coimbra, Portugal, on March 19-21, 2019.

Topics of interest for submission include, but are not limited to:

- Resilience in 5G networks
- Availability of 5G networks and services
- Ultra-Reliable Low Latency Communications (URLLC)
- Design of resilient and reliable IoT systems
- Resilience in Software-Defined Networking (SDN)
- High-availability for Network Functions Virtualization (NFV) infrastructures
- Network dependability in cloud networking
- Dependability of cellular/mobile networks
- Survivability and traffic engineering for optical, IP and multi-layer networks
- Robustness of multi-domain network and protocol architectures
- Reliability of wireless access and mesh networks
- Survivability in grid and distributed computing
- Reliability and resiliency of data center networks
- Recovery of overlay and peer-to-peer networks
- Risk and reliability in the Internet and enterprise networks
- Communication reliability for smart city applications and intelligent transport systems
- Methods for survivable network and systems design, analysis and operation
- Planning and optimization of reliable networks, systems, and services
- Network reliability analysis
- Reliability and robustness of networks optimized and managed based on Al/Machine Learning techniques

- Data analytics and Machine Learning for fault diagnosis
- Network coding techniques to improve resilience
- Decomposition techniques for reliable network optimization
- Service differentiation based on recovery methods
- Simulation techniques for network resilience
- Quality of Experience (QoE) and network service availability assessments
- Reliability requirements and metrics for users, businesses, and the society
- Dependability of networked applications
- Restoration of services under various types of failures
- Application and service-specific survivability techniques
- Robustness of compound services
- Resilience of networked critical infrastructures
- Network robustness to natural disasters
- Robust network design for hostile environments
- Security issues in networks and their relation to survivability
- Network dependability and energy consumption trade-offs
- Network resilience combined with economics and commercial issues
- Standardization of network resilience and reliability
- Public policy issues for survivability and resilience

### **Paper Submission**

The authors are invited to submit high-quality original technical papers for presentation at the conference and publication in the DRCN 2019 Proceedings. Only PDF files will be accepted for the review process and all submissions must be done electronically through EDAS: <a href="https://edas.info/N25127">https://edas.info/N25127</a>.

All submissions must be written in English and must use standard IEEE two-column conference templates that can be downloaded from:

https://www.ieee.org/conferences/publishing/templates.html.

Papers can be of two types: Full papers or Short papers, up to 8 pages and 5 pages respectively, including tables, figures and references. Full papers accepted as short papers will be required to be reduced to 5-pages length.

At least one author of each accepted paper is required to register to DRCN 2019 to have his/her paper published in the conference proceedings. The paper must be presented at the conference by **one author** to be submitted for publication in IEEE Xplore.

## Venue

The conference will take place at the University of Coimbra, Portugal.

### **Important dates**

Paper submission: October 5, 2018 September 21, 2018

Notification to authors: November 30, 2018
Camera-ready papers: December 14, 2018

• Conference: March 19-21, 2019

#### **General Co-Chairs**

**Prosper Chemouil**, Freelance Scientist, France **Teresa Gomes**, University of Coimbra and INESC Coimbra, Portugal

# **TPC Co-Chairs**

**Dominic Schupke**, Airbus, Germany **David Tipper**, University of Pittsburgh, USA

#### **Overall Arrangements**

**Lúcia Martins**, University of Coimbra and INESC Coimbra, Portugal