12th International Conference on the Network of the Future

Call for Papers

Paper Submission: April 23, 2021 Acceptance Notification: June14, 2021 Camera Ready due: June 25, 2021 Conference dates: October 6 – 8, 2021

Venue: University of Coimbra, Portugal

The 12th International Conference on Network of the Future (NoF) is inviting authors to submit original contributions in the area of Future Internet design, with emphasis on enabling and cutting-edge technologies from the perspectives of specification, design and analysis related to network of future architecture, applications, services, management, implementation, scalability, standardization, business and legal aspects, just to name a few. The conference aims at providing a forum for researchers, students, and professionals to exchange ideas, share their experiences, and discuss their research results around a single-track of technical sessions and a series of keynote speeches. NoF 2021 will take place at the University of Coimbra, Portugal.

Topics of Interest (but not limited to)

Networks

- 5G/6G networks
- Virtual networks
- Overlay networks
- · Wireless networks and cellular networks
- · Wireless sensor networks
- · Access, metro, backbone and core networks
- Vehicular ad hoc networks and intelligent transportation systems
- · Mesh and ad hoc networks
- Internet of Things networks
- Information-centric networks
- · Enterprise networks and campus networks
- Time-sensitive networks
- Data center networks
- · Optical networks
- IP networks
- Home networks
- SCADA networks and distributed control systems
- Smart Cities and Smart Grids
- · Resilient networks

Enablers

- Quality of service and traffic engineering
- Network Artificial Intelligence, Machine Learning and Reasoning
- Network Data Analytics, Anomaly Detection, Feature Extraction
- Network automation and orchestration
- Autonomic, Cognitive and Intent-based Networking
- 5G/6G Network Architecture, Services and Protocols
- 5G/6G Control and Management Architecture
- 5G/6G Functional Decomposition and Composition
- Advanced 5G Infrastructure Slicing and Radio Slicing
- Scalability and multi-tenancy in 5G/6G
- Network Programmability and Softwarization
- Protocols for Ultra-Low Latency and Ultra-High Reliability

- · Fog, Edge and Multi-Access Computing
- Software Defined Networking (SDN) and High Availability
- Network Function Virtualization (NFV) and Orchestration
- Service Function Chaining and Virtual Network Embedding
- Big data and Fast Data Processing and Management
- CDN Architectures and Network Cache Allocation Schemes
- Advanced multimedia and real-time communications
- Performance, Optimization and Resource Dimensioning
- Security, Trust and Privacy
- · Use of Blockchains in Networking and Servicing

Business and Legal Aspects

- Economic aspects
- Multi-stakeholder aspects
- Service level agreements
- · Lifecycle aspects
- · Process and workflow aspects
- Legal perspective
- Regulatory perspective
- Privacy aspects

Methods

- Mathematical optimization
- Control theory
- Probability theory, stochastic processes, and queuing theory
- Machine learning and artificial intelligence
- Evolutionary algorithms
- Economic theory and game theory
- Mathematical logic and automated reasoning
- Data mining and (big) data analysis
- Monitoring and measurements
- Computer simulation experiments
- Prototype implementation and testbed experimentation
- Field trials

Authors are invited to submit original contributions that have not been published or submitted for publication elsewhere. Papers should be prepared using the IEEE 2-column conference style and are limited to 9 pages including references (full papers) or 5 pages including references (short papers). They must be submitted electronically in PDF format through EDAS at: https://edas.info/N28072 For more information, please check https://nof20

NoF 2021 is technically co-sponsored by IEEE, IEEE ComSoc All accepted & presented papers will be submitted to IEEE Xplore

Technical Program Co-Chairs:

Tim Wauters (Ghent University & imec, Belgium) Susana Sargento, (University of Aveiro, Portugal)

General Co-Chairs:

Lúcia Martins (University of Coimbra & INESC Coimbra, Portugal) Carmen Mas Machuca (Technical Universitf Munich, Germany)

Executive Chair:

Prosper Chemouil (CNAM, France)