Call for papers

Optical and Grid Networking Symposium (OGN)

IEEE ICNC 2024
Big Island, Hawaii, USA, Feb 19-22, 2024
http://www.conf-icnc.org/2024

Symposium Co-chairs

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Scope

The Optical and Grid Computing Symposium will focus on state-of-the-art research topics related to all aspects of optical communications, networking, experiments, demonstrations, field trials, and applications in support of backbone/metro/access/wireless/datacenter networks and grid/cloud/fog/edge computing. To ensure a complete coverage of the advances in optical communication and networking related technologies, the Optical and Grid Computing Symposium aims at presenting original contributions in, but not limited to, the following topical areas:

- Optical networks to support cloud, grid, and edge computing
- Network function virtualization (NFV) in optical networks
- Software defined networking (SDN) for optical networks
- Machine learning for optical networks
- Optical networks and systems for IoT and smart grids
- Optical networking in 5G systems
- Convergence of optical and wireless networks
- Visible light communications and networks
- Free space optical communications and networking
- Optical network architectures and cloud-native networking
- Optical communications and networking for deep space networks
- Quantum communications and their applications in future optical networks
- Elastic/flexible-grid optical networks
- Multi-layer and multi-domain optical networks
- Multi-band, multi-core, multi-mode optical networks
- Digital twins for optical networks
- Disaggregated optical networks, Optical access networks
- Optical inter and intra-datacenter networks
- Optical network design and reconfiguration
- Optical network control and management
- Optical network virtualization
- Routing and spectrum assignment
- Protection and restoration
- Traffic grooming and traffic engineering in optical networks
- Impact of the physical-layer impairments on optical network design and traffic engineering

- IP-WDM integration
- Multicasting in optical networks
- Optical network security
- Optical switching technologies, devices, and architectures
- Multi-granularity switching
- Field trials, new applications and experiments
- Energy-efficient/green optical networks and systems

Submission Guidelines

Perspective authors should follow the instructions at http://www.conf-icnc.org/2024/author.htm to prepare their manuscripts. All papers should be submitted via EDAS. Submission information can be found at http://www.conf-icnc.org/2024/cfp.htm.

Short Biographies of Co-Chairs

Zuqing Zhu received his PhD degree from the Department of Electrical and Computer Engineering, University of California, Davis, in 2007. From July 2007 to January 2011, he worked in the Service Provider Technology Group of Cisco Systems, San Jose, California, as a senior engineer. In January 2011, he joined the University of Science and Technology of China, where he is currently a Full Professor and vice dean of School of Information Science and Technology. He has published more than 300 papers in peer-reviewed journals and conferences. He is currently the Area Editor of Optical Communications and Networking of the IEEE Open Journal of the Communications Society, an Associate Editor of IEEE Transactions on Network and Service Management, Optics Express, IEEE Systems Journal and others, and has been the Lead Series Editor of the Optical Communications Series in IEEE Communications Magazine. He is the Steering Committee Chair of the IEEE International Conference on High Performance Switching and Routing (HPSR), a Member-at-Large of GLOBECOM/ICC Technical Content (GITC) Committee, the Chair of the Optical Networking Technical Committee of IEEE ComSoc, and has been an IEEE ComSoc Distinguished Lecturer with the term of 2018-2021. Together with his students, he has received Best Paper Awards from ICC 2013, GLOBECOM 2013, ICNC 2014, ICC 2015, and ONDM 2018. He is a Fellow of IEEE and a Senior Member of Optica (former OSA).

Massimo Tornatore is a full professor with the Department of Electronics, Information, and Bioengineering, Politecnico di Milano, Italy, and a Fellow of IEEE. He has also held appointments as an Adjunct Professor at the University of California, Davis, USA, and as visiting professor at the University of Waterloo, Canada. His research interests include performance evaluation, optimization, and design of communication networks (with an emphasis on the application of optical networking technologies), network virtualization, network reliability, and machine learning application for network management. In these areas, he has published more than 400 peer-reviewed conferences and journal papers (with 19 best paper awards), 2 books, and 1 patent. He is a member of the Editorial Board of IEEE Communication Surveys and Tutorials, IEEE Communication Letters, IEEE Transactions on Network and Service Management, IEEE Transactions on Networking, and Elsevier Optical Switching and Networking. He is an active member of the technical program committee of various networking conferences such as INFOCOM, OFC, ICC, and GLOBECOM. He has also acted as technical program chair of ONDM 2016 and 2022, DRCN 2017 and DRCN 2019 conferences. He participated in several R&D projects in USA, Canada, and Italy.