

Special Issue

Machine Learning in the Era of Computing and Network Integration

Message from the Guest Editors

In this Special Issue, we will focus on ML-enabled networking and computation and intend to explore novel networking and computation resource provision, dynamic network operations, and self-managed networks to pave the way toward autonomous networks.

- ML-aided network performance monitoring, telemetry services
- Novel data plane technologies, network infrastructure designs
- Network survivability, availability-aware service provisioning
- Resource virtualization in cloud and network integration
- Service orchestration and control architecture
- SDN controller embedded with AI engine
- Cloud computing and edge computing cooperation
- AI assistant network operation method
- AI-based failure diagnosis algorithm
- Autonomous routing crossing multi-domain networks
- Interoperability and optimization between computing resources and transport resources
- Security in cloud and network integration.

Guest Editors

Dr. Shuangyi Yan

Smart Internet Lab, University of Bristol, Bristol BS8 1TL, UK

Prof. Dr. Yongli Zhao

State Key Laboratory of Information Photonics and Optical Communications, Beijing University of Posts and Telecommunications, Beijing 100876, China

Dr. Xiaoliang Chen

University of California Davis, Davis, CA 95616, USA

Deadline for manuscript submissions

closed (30 November 2021)



Photonics

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CiteScore 3.5



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Photonics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
photonics@mdpi.com

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You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

Editor-in-Chief

Prof. Dr. Nelson Tansu

School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

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