

## Special Issue

# Machine Learning and Artificial Intelligence for Optical Networks

### Message from the Guest Editor

In recent years, with the rapid development of generative artificial intelligence, applications related to machine learning and artificial intelligence have attracted increasing attention. Machine learning and artificial intelligence systems have significant advantages in large-scale data processing, pattern recognition, and intelligent decision-making. Over the past 20 years, data traffic in optical networks has grown dramatically, highlighting their critical role and the market demand for this technology. Therefore, academia and industry should work hand in hand to jointly develop technologies related to machine learning and artificial intelligence for optical networks.

To this end, we are pleased to announce a special issue focusing on forward-looking concepts in machine learning and artificial intelligence for optical networks. We aim to compile and provide comprehensive recommendations and guidelines to help envision the technological prospects of this field. This special issue welcomes original research articles and review papers on theoretical or experimental advances in machine learning and artificial intelligence for optical networks.

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### Guest Editor

Dr. Shu-Hao Chang

Science and Technology Policy Research and Information Center,  
National Institutes of Applied Research, Taipei 10636, Taiwan

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### Deadline for manuscript submissions

30 April 2026



## Photonics

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*Photonics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[photonics@mdpi.com](mailto:photonics@mdpi.com)

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### Message from the Editor-in-Chief

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.

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### 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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