Special Issue

Optical Fiber Sensors: Shedding More Light with Machine Learning

Message from the Guest Editors

Optical fiber sensing technologies are at the cutting edge of modern sensing systems, heralding a new era in precision measurement and real-time data acquisition. This Special Issue seeks to publish high-quality papers that explore the integration of machine learning with various fiber-based sensor technologies. We welcome research that delves into a diverse array of topics, including, but not limited to, the following: the application of machine learning techniques for processing of complex responses of optical fiber sensors, including distributed sensors; solving signal demodulation tasks in optical fiber sensors using machine learning techniques, including speckle pattern processing, multimode interference signal demodulation, fading reduction, and response linearization in distributed optical fiber sensors; application of machine learning techniques to advancing design process and optimization of optical fiber sensors; and simulation of optical fiber sensors signals using machine learning techniques.

Guest Editors

Dr. Koustav Dey

Dr. Nikolai Ushakov

Prof. Dr. Sourabh Roy

Dr. Elena De Vita

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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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