Special Issue

Advances in Data-Driven Distributed Intelligence for Network Efficiency, Security, Measurement and Trust

Message from the Guest Editor

This Special Issue is dedicated to the application of data-driven methods and distributed AI techniques. including Federated Learning, Gossip Learning, and Split Learning, in the domains of Efficiency, Security, Measurement, and Trust in computer networking, By integrating distributed Al methodologies, this Special Issue aims to bolster network security, streamline authentication processes, refine measurement accuracy, and enhance trust, all while safeguarding users' privacy and optimizing energy resources. This Special Issue seeks to uncover innovative approaches for harnessing distributed Al's potential for Efficiency, Measurement, Security, and Trust, especially within dynamic network settings and energy-efficient IoT environments. By emphasizing the practical implementation of these advanced technologies, this endeavor contributes to a more secure, privacyfocused, and energy-efficient future in computer networking. The topics of interest include, but are not limited:

- Data-Driven Methods:
- Distributed Machine Learning;
- Federated Learning;
- Gossip Learning;
- Split Learning;
- (Mobile) Ad Hoc Networking;
- IoT (Internet of Things).

Guest Editor

Dr. Antonio Di Maio

Communication and Distributed Systems Group, University of Bern, 3012 Bern, Switzerland

Deadline for manuscript submissions

closed (15 July 2025)



Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/190638

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

mdpi.com/journal/electronics





Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) / CiteScore - Q1 (Electrical and Electronic Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).

