Special Issue

Artificial Intelligence in Communication Systems

Message from the Guest Editor

Artificial intelligence (AI) has proven its worth in the last decade in solving complex and/or poorly structured problems in a diverse array of applications. However, the application of AI in the design, analysis, and maintenance of wireless communications networks is still in its infancy, though in a rapid growth phase. In this Special Issue, we aim to explore the practical applications of AI within the lower layers of the protocol stack of wireless communications systems. Cross-layer designs will be of particular interest, and trade-offs between complexity and performance will be emphasized. Test-bedding and field-trial descriptions are especially welcome. Topics of interest include, but are not limited to, the following:

- Non-linear effects in wireless transceiver design;
- Wireless network resource allocation;
- IoT and other specialized network design;
- Localization of wireless devices;
- Detection and prevention of cyber-security attacks at the wireless network edge;
- Military communications;
- AI techniques suitable for online training;
- Systematic design and adaptation of AI parameters in a dynamic setting;
- Novel practical applications of AI in wireless communications.

Guest Editor

Prof. Teng Joon Lim

Dept. of Electrical & Computer Eng., National University of Singapore, Singapore, Singapore

Deadline for manuscript submissions

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

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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

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