



Advances in the Use of Artificial Intelligence (AI)/Machine Learning (ML) and IoT in the Primary Sector

Guest Editors:

Prof. Dr. Nikos Petrellis

Department of Electrical and
Computer Engineering, University
of Peloponnese, 26334 Patra,
Greece

Prof. Dr. Nikolaos Voros

Department of Electrical and
Computer Engineering, University
of Peloponnese, 26334 Patra,
Greece

Dr. Christos P. Antonopoulos

Department of Electrical and
Computer Engineering, University
of Peloponnese, 26334 Patra,
Greece

Deadline for manuscript
submissions:

closed (31 July 2024)

Message from the Guest Editors

Dear Colleagues,

Artificial Intelligence (AI), and Machine Learning (ML) more generally, have been used in a variety of fields of application. Images, as well as other signals generated by IoT sensors, can be efficiently processed using AI or ML techniques. In the primary sector, AI and ML can be used to process signals from cameras and IoT sensors for crop, livestock, as well as fish culture monitoring. Diseases can be diagnosed early, and harvesting time can be optimally scheduled to achieve the highest production efficiency with the lowest cost and the lowest environmental impact.

This Special Issue of *Electronics* will provide a forum for presenting novel AI and ML approaches on data captured by IoT sensors and cameras in primary sector applications. The images can be captured from mobile devices, UAVs, or underwater cameras. Original research articles and review papers are both welcome.

Topics of Interest of this Special Issue include, but are not limited to:

- AI/ML in precision agriculture applications
- AI/ML in livestock monitoring
- AI/ML in fish cultures





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Flavio Canavero

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

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

Journal Rank: JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Control and Systems Engineering*)

Contact Us

Electronics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/electronics
electronics@mdpi.com
[X@electronicsMDPI](https://x.com/electronicsMDPI)