Special Issue

The Application of Machine Learning and Deep Learning Techniques in Agriculture

Message from the Guest Editors

This Special Issue aims to showcase the research findings in the use of Machine Learning and Deep Learning techniques and related technologies when applied to agricultural practice. The introduction of technologies is creating opportunities to gather digital datasets in real-time, which can then be used by models with the ability to learn from and interpret this information. At the core of this manner of working are the concepts of Artificial Intelligence, Machine Learning and Deep Learning. Research areas include but are not limited to how machine learning and deep learning techniques may be applied to the following:

- Improving crop yields using datasets provided by the IoT technologies.
- Enhancing land usage from geographical imagery produced by Earth observation satellites or Unmanned Aerial Vehicle platforms.
- Targeting the use of weed control products by analyzing the quality of the soil from in situ sensors.
- Determining the health and quality of plants and the risk of disease from graphical imagery.
- Applying irrigation from information provided by wireless sensor networks.
- Identifying the optimum time to sow, fertilise and harvest crops.

Guest Editors

Prof. Dr. Ray E. Sheriff

Department of Computer Science, Edge Hill University, Ormskirk L39 4QP, UK

Dr. Chiew Foong Kwong

Next Generation Internet of Everything Laboratory, Faculty of Science and Engineering, University of Nottingham Ningbo, Ningbo 315104, China

Deadline for manuscript submissions

28 February 2026

AgriEngineering

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 4.7

mdpi.com/si/231650

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

mdpi.com/journal/agriengineering

AgriEngineering

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 4.7

mdpi.com/journal/agriengineering

MDPI

About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Dr. Mathew G. Pelletier
Retired Scientist from Agricultural Research Service, United States Department of Agriculture, Lubbock, TX, USA

Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), PubAg, FSTA, AGRIS, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Agricultural Engineering) / CiteScore - Q1 (Horticulture)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 20.6 days after submission; acceptance to publication is undertaken in 5.4 days (median values for papers published in this journal in the first half of 2025).