



## Neural Networks and Image Analysis in Intelligent Agricultural Engineering

Guest Editor:

**Dr. Suresh Neethirajan**

Department of Animal Science &  
Aquaculture, Faculty of  
Agriculture & Computer Science,  
Dalhousie University, 6050  
University Ave, Halifax, NS B3H  
1W5, Canada

Deadline for manuscript  
submissions:

**closed (15 June 2023)**

### Message from the Guest Editor

The agricultural sector is undergoing a transformation based on precision agriculture and digital livestock farming technologies, which has led to significant improvements in addressing challenges and accelerating the transition to sustainable food systems. but substantial further progress is needed. Smart farming based on digital agriculture principles and innovative governance models requires more precise and real-time platforms for the enhancement of crop production, animal welfare, and productivity.

Several challenges need to be overcome to develop efficient analytics for the dynamic and automated processing of the temporal-spatial distribution of soil, crops, animal, and environments in real time. hence, there is a need for deep learning and advanced machine learning approaches for tackling the challenges of big data and real-time series prediction for developing novel solutions in the agrifood domain. This Special Issue calls for papers concerning the role of machine vision, sensor-enabled big data applications, and the implications of neural networks for smart agricultural applications.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Les Copeland**

Sydney Institute of Agriculture,  
School of Life and Environmental  
Sciences, The University of  
Sydney, Sydney, NSW 2006,  
Australia

## Message from the Editor-in-Chief

*Agriculture* (ISSN 2077-0472) is an international, crossdisciplinary and scholarly open access journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. *Agriculture* is published in an open access format – research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the public have unlimited and free access to the content as soon as it is published.

## 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), PubAg, AGRIS, RePEc, and other databases.

**Journal Rank:** JCR - Q1 (*Agronomy*) / CiteScore - Q2 (*Plant Science*)

## Contact Us

---

Agriculture Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/agriculture](http://mdpi.com/journal/agriculture)  
[agriculture@mdpi.com](mailto:agriculture@mdpi.com)  
[X@AgricultureMdpi](https://twitter.com/AgricultureMdpi)