Special Issue

Computer Vision Analysis Applied to Farm Animals

Message from the Guest Editors

The integration of computer vision and image analysis into precision livestock farming has revolutionized agricultural practices, offering innovative solutions for monitoring and managing farm animals. Historically, traditional animal husbandry relied heavily on manual inspection and intervention. However, recent advances in technology have introduced sophisticated image processing techniques that enable real-time, automated analysis. The aim of this Special Issue is to explore cutting-edge research and applications in computer vision and image analysis for precision livestock farming, emphasizing their role in improving animal health, welfare, and overall farm efficiency. We are soliciting papers that present novel methodologies, applications, and case studies in this field. Topics of interest include, but are not limited to, advanced imaging techniques for monitoring animal health, automated behavior analysis, and integration of computer vision systems with other precision livestock farming technologies. This Special Issue seeks to bring together innovative research and practical solutions to address current challenges and future opportunities in livestock farming.

Guest Editors

Dr. Yang Zhao

Department of Animal Science, University of Tennessee, Knoxville, TN 37996, USA

Dr. Beibei Xu

Population Medicine and Diagnostic Sciences, Cornell University, Ithaca, NY 14850, USA

Deadline for manuscript submissions

30 September 2025

Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6
CiteScore 6.3

mdpi.com/si/218396

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

mdpi.com/journal/agriculture

Agriculture

an Open Access Journal by MDPI

Impact Factor 3.6
CiteScore 6.3

mdpi.com/journal/agriculture

MDPI

About the Journal

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, cross-disciplinary and scholarly journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. We invite submissions from authors according to the aims and scope of the journal described in more detail on this page. *Agriculture* is published in an open access format – articles are published on the journal's website immediately after acceptance, giving the scientific community and the public unlimited and free access to the content.

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

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 - Q1 (Plant Science)