# agriculture

IMPACT FACTOR 3.3

CITESCORE 4.9

*Special Issue Reprint*

## Application of Vision Technology and Artificial Intelligence in Smart Farming

www.mdpi.com/books/reprint/8646

Edited by
Xiuguo Zou
Zheng Liu
Xiaochen Zhu
Wentian Zhang
Yan Qian
Yuhua Li

ISBN 978-3-03928-597-6 (Hardback)
ISBN 978-3-03928-598-3 (PDF)

Artificial intelligence (AI) has been gaining traction in smart agriculture. Machine learning (ML) can be used for environmental and production performance data analysis and prediction, and computer vision (CV) can monitor abnormal phenotypes in plants and animals. They have massive potential to enhance the overall functioning of smart farming and reduce manual labor. This Special Issue focuses on the novel application of ML and CV in smart farming. The content of this Special Issue encompasses the use of various AI models for the in-depth analysis of quantitative data, RGB images, remote sensing images, and 3D point cloud data, thereby completing tasks such as environmental and growth state prediction, target recognition, and early disease diagnosis, improving crop growth performance and animal welfare.

MDPI

Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/8646

# MDPI Books

## Publishing Open Access Books & Series

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.

### Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.

### Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.

### High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.

### High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).

### Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

Learn more ▶ mdpi.com/books