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Collana	Algorithms for Intelligent Systems, , 2524-7573
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Soggetti	Computational intelligence Machine learning Robotics Agriculture Image processing - Digital techniques Computer vision Computational Intelligence Machine Learning Computer Imaging, Vision, Pattern Recognition and Graphics
Lingua di pubblicazione	Inglese
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Nota di contenuto	Harvesting robots for smart agriculture -- Drone-based weed detection architectures using deep learning algorithms and real-time analytics -- A deep learning-based detection system of multi-class crops and orchards using a UAV -- Real-life agricultural data retrieval for large scale annotation flow optimization -- Design and analysis of IoT-based modern agriculture monitoring system for real time data collection -- Estimation of wheat yield based on precipitation and evapotranspiration using soft computing methods -- Coconut maturity recognition using convolutional neural network -- Agri food products quality assessment methods -- Medicinal plant recognition from leaf images using deep learning -- ESMO based plant leaf disease identification: A machine learning approach -- Deep learning-based cuali flower disease classification -- An Intelligent System for Crop Disease Identification

	and Dispersion Forecasting in SriLanka -- Apple leaves diseases detection using deep convolutional neural networksand transfer learning -- A deep learning paradigm for detection and segmentation of plant leaves diseases -- Early-stage prediction of plant leaf diseases using deep learning models.
Sommario/riassunto	This book is as an extension of previous book “Computer Vision and Machine Learning in Agriculture” for academicians, researchers, and professionals interested in solving the problems of agricultural plants and products for boosting production by rendering the advanced machine learning including deep learning tools and techniques to computer vision algorithms. The book contains 15 chapters. The first three chapters are devoted to crops harvesting, weed, and multi-class crops detection with the help of robots and UAVs through machine learning and deep learning algorithms for smart agriculture. Next, two chapters describe agricultural data retrievals and data collections. Chapters 6, 7, 8 and 9 focuses on yield estimation, crop maturity detection, agri-food product quality assessment, and medicinal plant recognition, respectively. The remaining six chapters concentrates on optimized disease recognition through computer vision-based machine and deep learning strategies.