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Descrizione fisica	1 online resource (262 pages)
Collana	Smart Innovation, Systems and Technologies, , 2190-3026 ; ; 297
Disciplina	006.693
Soggetti	Computational intelligence Signal processing Artificial intelligence Image processing - Digital techniques Computer vision Computational Intelligence Signal, Speech and Image Processing Artificial Intelligence Computer Imaging, Vision, Pattern Recognition and Graphics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Color Restoration of RGB-NIR Images in Low-light Environment Using CycleGAN -- A Novel Space Division Rough Set Model for Feature Selection -- Development of Mobile Food Recognition System Based on Deep Convolutional Network -- Image-Based Physics Rendering for 3D Surface Reconstruction: A Survey -- Network Intrusion Detection Based on Apriori-Kmeans Algorithm -- Global Analysis of Discrete S-I-R Models and S-I-S Systems -- Overview of SAR Image Change Detection Based on Segmentation -- Water Environmental Quality Assessment and Effect Prediction Based on Artificial Neural Network -- Full-Focus Imaging Detection of Ship Ultrasonic Phased Array Based on Directivity Function -- Longitudinal Structure Analysis and Segmentation Algorithm of Dongba Document -- Image Recognition Methods Based on Deep Learning -- Insulator Detection Study Based on Improved

Faster-RCNN -- Comparative Analysis of Automatic Poetry Generation Systems Based on Different Recurrent Neural Networks -- Grid False Data IntrusionDetection Method Based on Edge Computing and Federated Learning -- Research on the Simulation of Informationized Psychological Sand Table Based on 3D Scene -- Innovative Design of Traditional Arts and Crafts Based on 3D Digital Technology -- Citrus Positioning Method Based On Camera And Lidar Data Fusion -- Research on Graphic Design of Digital Media Art based on Computer Aided Algorithm -- Ore Detection Method Based on YOLOv4.

Sommario/riassunto

This book gathers selected papers presented at the conference “Advances in 3D Image and Graphics Representation, Analysis, Computing and Information Technology,” one of the first initiatives devoted to the problems of 3D imaging in all contemporary scientific and application areas. The two volumes of the book cover wide area of the aspects of the contemporary multidimensional imaging and outline the related future trends from data acquisition to real-world applications based on new techniques and theoretical approaches. This volume contains papers devoted to the theoretical representation and analysis of the 3D images. The related topics included are 3D image transformation, 3D tensor image representation, 3D content generation technologies, 3D graphic information processing, VR content generation technologies, multi-dimensional image processing, dynamic and auxiliary 3D displays, VR/AR/MR device, VR camera technologies, 3D imaging technologies and applications, 3D computer vision,3D video communications, 3D medical images processing and analysis, 3D remote sensing images and systems, deep learning for image restoration and recognition, neural networks for MD image processing, etc.