

1. Record Nr.	UNINA9911021150703321
Autore	Jain L. C
Titolo	3D Imaging Technologies and Deep Learning : Proceedings of the 3DIT-MSP&DL 2024 // edited by Lakhmi C. Jain, Roumiana Kountcheva, Srikanta Patnaik
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	981-9652-49-9
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (381 pages)
Collana	Smart Innovation, Systems and Technologies, , 2190-3026 ; ; 120
Altri autori (Persone)	KountchevaRoumiana PatnaikSrikanta
Disciplina	006.3
Soggetti	Computational intelligence Artificial intelligence Signal processing Multimedia systems Computational Intelligence Artificial Intelligence Signal, Speech and Image Processing Multimedia Information Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1: Protection and Inheritance of Intangible Cultural Heritage Based on Virtual Reality Technology - Taking Dongguan as an Example -- Chapter 2: On the Application of Virtual Reality Technology in Digital Services of College Libraries -- Chapter 3: Research on User Experience Oriented to Digital Exhibition and Presentation Narratives in Museums -- Chapter 4: Research on User Experience Design in Virtual Museums under the Concept of Interaction Design -- Chapter 5: Design of an Immersive Museum Navigation APP in the Context of Audiovisual Integration -- Chapter 6: Soil Nutrient Dynamic Monitoring using Hyperspectral Imaging and Artificial Intelligence -- Chapter 7: Research on the Application of VR and Deep Learning in Plant Landscape Design -- Chapter 8: Post-processing and Visual Effect Optimization of Digital Films in the Information Technology Context -- Chapter 9: Optimization and Application of 3D Point Cloud Deep Learning

Algorithm -- Chapter 10: Optimization of 3D Model Defect Detection  
Algorithm Based on Deep Learning -- Chapter 11: Data Recognition and Scoring Path in English Oral Training Platform Based on Deep Learning Model -- Chapter 12: Sentiment Analysis Combining Large Models and Deep Learning: Multi-Source Data Fusion from Text to Speech -- Chapter 13: English Speech Distortion Detection and Repair Based on Deep Learning -- Chapter 14: Design of a Micro-Landmark Recognition and Intelligent Navigation System Based on Immersive Virtual Reality Technology -- Chapter 15: A Framework for Human Skeleton Keypoint Detection in Low-Light Environments Based on Deep Learning -- Chapter 16: Application and Optimization in Ship Inspection and Intelligent Maintenance -- Chapter 17: CVI-LayoutXML: Enhanced Multimodal Resume Information Extraction Model -- Chapter 18: Research on Personal Credit Fault Prediction Method Based on Improved Logistic Regression Model -- Chapter 19: Remote Sensing Image Semantic Segmentation Prediction and Enhancement System Based on Deep Learning -- Chapter 20: Analysis of Chinese Learners' Behavioral Patterns and Teaching Applications Based on Data Mining -- Chapter 21: Detection of Chemical Pollutants in Water and Ecological Risk Assessment based on ResNet Convolutional Neural Network -- Chapter 22: Water Conservancy Engineering Quality Monitoring and Early Warning System Based on BP Neural Network -- Chapter 23: Construction of UHPC Compressive Strength Prediction System Based on GA-BP Neural Network -- Chapter 24: Deep Learning-Based Feature Extraction and Analysis of 3D Models -- Chapter 25: Optimization of 3D Image Deep Learning Super-Resolution Algorithm.

---

#### Sommario/riassunto

This book presents high-quality research in the field of 3D imaging technology. The sixth edition of International Conference on 3D Imaging Technology (3DDIT-MSP&DL 2024) continues the good traditions already established by the first five editions of the conference to provide a wide scientific forum for researchers, academia, and practitioners to exchange newest ideas and recent achievements in all aspects of image processing and analysis, together with their contemporary applications. The conference proceedings are published in two volumes. The main topics of the papers comprise famous trends as: 3D image representation, 3D image technology, 3D images and graphics, and computing and 3D information technology. In these proceedings, special attention is paid at the 3D tensor image representation, the 3D content generation technologies, big data analysis, and deep learning, artificial intelligence, the 3D image analysis and video understanding, the 3D virtual and augmented reality, and many related areas. The first volume contains papers in 3D image processing, transforms, and technologies. The second volume is about computing and information technologies, computer images and graphics and related applications. The two volumes of the book cover a wide area of the aspects of the contemporary multidimensional imaging and the related future trends from data acquisition to real-world applications based on various techniques and theoretical approaches.

---