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Titolo	Advances in Visual Computing : 14th International Symposium on Visual Computing, ISVC 2019, Lake Tahoe, NV, USA, October 7–9, 2019, Proceedings, Part I // edited by George Bebis, Richard Boyle, Bahram Parvin, Darko Koracin, Daniela Ushizima, Sek Chai, Shinjiro Sueda, Xin Lin, Aidong Lu, Daniel Thalmann, Chaoli Wang, Panpan Xu
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Descrizione fisica	1 online resource (xxxv, 698 pages)
Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics ; ; 11844
Disciplina	006.6 006.4
Soggetti	Pattern recognition systems Image processing - Digital techniques Computer vision Artificial intelligence Computer engineering Computer networks Data protection Automated Pattern Recognition Computer Imaging, Vision, Pattern Recognition and Graphics Artificial Intelligence Computer Engineering and Networks Data and Information Security
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Deep Learning I -- Application of Image Classification for Fine-Grained Nudity Detection -- DeepGRU: Deep Gesture Recognition Utility -- Delineation of Road Networks Using Deep Residual Neural Networks and Iterative Hough Transform -- DomainSiam: Domain-Aware Siamese Network for Visual Object Tracking -- Reconstruction Error Aware

Pruning for Accelerating Neural Networks -- Computer Graphics I --
Bioinspired Simulation of Knotting Hagsh -- Interactive 3D
Visualization for Monitoring and Analysis of Geographical Trac Data
of Various Domains -- Propagate and Pair: A Single-Pass Approach to
Critical Point Pairing in Reeb Graphs -- Real-Time Ray Tracing with
SphericallyProjected Object Data -- Underwater Photogrammetry
Reconstruction: GPU Texture Generation from Videos Captured via AUV
-- Segmentation/Recognition -- Adaptive Attention Model for Lidar
Instance Segmentation -- View Dependent Surface Material Recognition
-- 3D Visual Object Detection from Monocular Images -- Skin
Identification Using Deep Convolutional Neural Network -- Resolution-
independent meshes of superpixels -- Video Analysis and Event
Recognition -- Automatic Video Colorization using 3D Conditional
Generative Adversarial Networks -- Improving Visual Reasoning With
Attention Alignment -- Multi-Camera Temporal Grouping for
Play/Break Event Detection in Soccer Games -- Trajectory Prediction by
Coupling Scene-LSTM with Human Movement LSTM -- Augmented
Curiosity: Depth and Optical Flow Prediction for Ecient Exploration --
Visualization -- Information Visualization for Highlighting Conicts in
Educational Timetabling Problems -- ContourNet: Salient Local Contour
Identification for Blob Detection in Plasma Fusion Simulation Data --
Mutual Information-Based Texture Spectral Similarity Criterion --
Accurate Computation of Interval Volume Measures for Improving
Histograms -- Ant-SNE: Tracking Community Evolution via Animated t-
SNE -- ST: Computational Vision, AI and Mathematical Methods for
Biomedical and Biological Image Analysis -- Automated Segmentation
of the Pectoral Muscle in Axial Breast MR Images -- Angio-AI: Cerebral
Perfusion Angiography with Machine Learning -- Conformal Welding
for Brain-Intelligence Analysis -- Learning Graph Cut Class Prototypes
for Thigh CT Tissue Identification -- Automatic Estimation of Arterial
Input Function in Digital Subtraction Angiography -- Biometrics --
One-Shot-Learning for Visual Lip-Based Biometric Authentication --
Age Group and Gender Classification of Unconstrained Faces --
Ecient 3D Face Recognition in Uncontrolled Environment -- Pupil
Center Localization Using SOMA and CNN -- Real-Time Face Features
Localization with Recurrent Rened Dense CNN Architectures -- Virtual
Reality I -- Estimation of the distance between ngertips using
silhouette and texture information of dorsal of hand -- Measuring
Reectance of Anisotropic Materials using Two Handheld Cameras --
FunPlogs - A Serious Puzzle Mini-Game for Learning Fundamental
Programming Principles Using Visual Scripting -- Automatic camera
path generation from 360 video -- Highlighting Techniques for 360
Degree Virtual Reality and Their Immersive Authoring -- Applications I
-- Jitter-free registration for Unmanned Aerial Vehicle Videos -- Heart
Rate Based Face Synthesis for Pulse Estimation -- Light-weight Novel
View Synthesis for Casual Multiview Photography -- DeepPrivacy: A
generative adversarial network for face anonymization -- Swarm
Optimization Algorithm for Road Bypass Extrapolation -- ST: Vision for
Remote Sensing and Infrastructure Inspection -- Concrete Crack Pixel
Classification using an Encoder Decoder Based Deep Learning
Architecture -- A Geometry-based Method for the Spatio-temporal
Detection of Cracks in 4D-Reconstructions -- An Automatic Digital
Terrain Generation Technique for Terrestrial Sensing and Virtual Reality
Applications -- Rebar Detection and Localization for Non-Destructive
Infrastructure Evaluation using Deep Residual Networks -- Computer
Graphics II -- Intrinsic Decomposition by learning from Varying
Lighting Conditions -- Pixel2Field: Single Image Transformation to
Physical Field of Sports Videos -- UnrealGT: Using Unreal Engine to

Generate Ground Truth Datasets -- Fast Omnidirectional Depth
Densification.

Sommario/riassunto

This book constitutes the refereed proceedings of the 14th International Symposium on Visual Computing, ISVC 2019, held in Lake Tahoe, NV, USA in October 2019. The 100 papers presented in this double volume were carefully reviewed and selected from 163 submissions. The papers are organized into the following topical sections: Deep Learning I; Computer Graphics I; Segmentation/Recognition; Video Analysis and Event Recognition; Visualization; ST: Computational Vision, AI and Mathematical methods for Biomedical and Biological Image Analysis; Biometrics; Virtual Reality I; Applications I; ST: Vision for Remote Sensing and Infrastructure Inspection; Computer Graphics II; Applications II; Deep Learning II; Virtual Reality II; Object Recognition/Detection/Categorization; and Poster.