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| Titolo                  | Advances in visual computing : 15th international symposium, ISVC 2020, San Diego, CA, USA, October 5-7, 2020, proceedings, part II // George Bebis [and eight others]  |
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| Edizione                | [1st ed. 2020.]   |
| Descrizione fisica      | 1 online resource (XXVIII, 777 p. 351 illus., 296 illus. in color.)   |
| Collana                 | Image Processing, Computer Vision, Pattern Recognition, and Graphics ;<br>; 12510   |
| Disciplina              | 006.4   |
| Soggetti                | Artificial intelligence<br>Image Processing and Computer Vision<br>Pattern perception   |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| Note generali           | Includes index.   |
| Nota di contenuto       | Object Recognition/Detection/Categorization -- Few-shot Image Recognition with Manifolds -- A scale-aware YOLO model for pedestrian detection -- Image categorization using Agglomerative clustering based smoothed Dirichlet mixtures -- SAT-CNN: A Small Neural Network for Object Recognition from Satellite Imagery -- Domain Adaptive Transfer Learning on Visual Attention Aware Data Augmentation for Fine-grained Visual Categorization -- 3D Reconstruction -- A Light-Weight Monocular Depth Estimation With Edge-Guided Occlusion Fading Reduction -- Iterative Closest Point with Minimal Free Space Constraints -- Minimal Free Space Constraints for Implicit Distance Bounds -- Medical Image Analysis -- Fetal Brain Segmentation using Convolutional Neural Networks with Fusion Strategies -- Fundus2Angio: A Novel Conditional GAN Architecture for Generating Fluorescein Angiography Images from Retinal Fundus Photography -- Multiscale Detection of Cancerous Tissue in High Resolution Slide Scans -- DeepTKAClassifier: Brand Classification of Total Knee Arthroplasty Implants using Explainable Deep Convolutional Neural Networks -- Multi-modal Image Fusion based on Weight Local Features and Novel Sum-Modified-Laplacian in Non-Subsampled |

Shearlet Transform Domain -- Robust Prostate Cancer Classification with Siamese Neural Networks -- Vision for Robotics -- Simple Camera-to-2D-LiDAR Calibration Method for General Use -- SalsaNext: Fast, Uncertainty-aware Semantic Segmentation of LiDAR Point Clouds -- Mobile Manipulator Robot Visual Servoing and Guidance for Dynamic Target Grasping -- Statistical Pattern Recognition -- Interpreting Galaxy Deblender GAN from the Discriminator's Perspective -- Variational Bayesian Sequence to Sequence Networks for Memory-Efficient Sign Language Translation -- A Gaussian Process Upsampling Model for Improvements in Optical Character Recognition -- Posters -- Video based fire detection using Xception and ConvLSTM -- Highway Traffic Classification for the Perception Level of Situation Awareness -- 3D-CNN for Facial Emotion Recognition in Videos -- Reducing Triangle Inequality Violations with Deep Learning and Its Application to Image Retrieval -- A Driver Guidance System to Support the Stationary Wireless Charging of Electric Vehicles -- An Efficient Tiny Feature Map Network For Real-Time Semantic Segmentation -- A Modified Syn2Real Network for Nighttime Rainy Image Restoration -- Unsupervised domain adaptation for person re-identification with few and unlabeled target data -- How Does Computer Animation Affect Our Perception Of Emotions in Video Summarization? -- Where's Wally: A Gigapixel Image Study for Face Recognition in Crowds -- Optical Flow Based Background Subtraction with a Moving Camera: Application to Autonomous Driving -- Deep Facial Expression Recognition with Occlusion Regularization -- Semantic Segmentation with Peripheral Vision -- Generator From Edges: Reconstruction of Facial Images -- CD2 : Combined Distances of Contrast Distributions for Image Quality Analysis -- Real-Time Person Tracking and Association on Doorbell Cameras -- MySnapFoodLog: Culturally Sensitive FoodPhoto-Logging App for Dietary BiculturalismStudies -- Hand Gesture Recognition Based on the Fusion of Visual and Touch Sensing Data -- Gastrointestinal Tract Anomaly Detection from Endoscopic Videos using Object Detection Approach -- A multimodal high level video segmentation for content targeted online advertising -- AI Playground: Unreal Engine-based Data Ablation Tool for Deep Learning -- Homework Helper: Providing Valuable Feedback on Math Mistakes -- Interface Design for HCI Classroom: From Learners' Perspective -- Pre-trained Convolutional Neural Network for the Diagnosis of Tuberculosis -- Near-Optimal Concentric Circles Layout -- Facial Expression Recognition and Ordinal Intensity Estimation: A Multilabel Learning Approach -- Prostate MRI Registration Using Siamese Metric Learning -- Unsupervised Anomaly Detection of the First Person in Gait from an Egocentric Camera -- Emotion Categorization from Video-frame Images using a Novel Sequential Voting Technique -- Systematic Optimization of Image Processing Pipelines Using GPUs -- A Hybrid Approach for Improved Image Similarity Using Semantic Segmentation -- Automated classification of Parkinson's Disease using Diffusion Tensor Imaging Data -- Nonlocal Adaptive Biharmonic Regularizer for Image Restoration -- A Robust Approach to Plagiarism Detection in Handwritten Documents -- Optical Coherence Tomography Latent Fingerprint Image Denoising -- CNN, Segmentation or Semantic Embeddings: Evaluating Scene Context for Trajectory Prediction -- Automatic Extraction of Joint Orientations in Rock Mass using PointNet and DBSCAN -- Feature Map Retargeting to Classify Biomedical Journal Figures -- Automatic 3D Object Detection from RGB-D data using PU-GAN -- Nodule Generation of Lung CT Images using a 3D Convolutional LSTM Network -- Conditional GAN for Prediction of Glaucoma Progression with Macular Optical Coherence Tomography.

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This two-volume set of LNCS 12509 and 12510 constitutes the refereed proceedings of the 15th International Symposium on Visual Computing, ISVC 2020, which was supposed to be held in San Diego, CA, USA in October 2020, took place virtually instead due to the COVID-19 pandemic. The 118 papers presented in these volumes were carefully reviewed and selected from 175 submissions. The papers are organized into the following topical sections: Part I: deep learning; segmentation; visualization; video analysis and event recognition; ST: computational bioimaging; applications; biometrics; motion and tracking; computer graphics; virtual reality; and ST: computer vision advances in geo-spatial applications and remote sensing Part II: object recognition/detection/categorization; 3D reconstruction; medical image analysis; vision for robotics; statistical pattern recognition; posters.

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