Record Nr. UNINA9910624387403321 Pattern Recognition and Computer Vision: 5th Chinese Conference, **Titolo** PRCV 2022, Shenzhen, China, November 4-7, 2022, Proceedings, Part III / / edited by Shiqi Yu, Zhaoxiang Zhang, Pong C. Yuen, Junwei Han, Tieniu Tan, Yike Guo, Jianhuang Lai, Jianguo Zhang Pubbl/distr/stampa Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2022 **ISBN** 3-031-18913-2 Edizione [1st ed. 2022.] Descrizione fisica 1 online resource (789 pages) Lecture Notes in Computer Science, , 1611-3349; ; 13536 Collana Disciplina 006.37 Soggetti Image processing - Digital techniques Computer vision Artificial intelligence Computer engineering Computer networks Computer systems Computer Imaging, Vision, Pattern Recognition and Graphics Artificial Intelligence Computer Engineering and Networks Computer System Implementation Computer Communication Networks Inglese Lingua di pubblicazione **Formato** Materiale a stampa Monografia Livello bibliografico Includes bibliographical references and index. Nota di bibliografia Nota di contenuto 3D Computer Vision and Reconstruction, Robots and Autonomous Driving -- Locally Geometry-Aware Improvements of LOP for Ecient Skeleton Extraction -- Spherical Transformer: Adapting Spherical Signal to Convolutional Networks -- Waterfall-Net: Waterfall Feature Aggregation for Point Cloud Semantic Segmentation -- Sparse LiDAR and Binocular Stereo Fusion Network for 3D Object Detection -- Full Head Performance Capture Using Multi-Scale Mesh Propagation --Learning Cross-domain Features for Domain Generalization on Point Clouds -- Unsupervised Pre-training for 3D Object Detection with Transformer -- Global Patch Cross-Attention for Point Cloud Analysis

-- EEP-Net: Enhancing local neighborhood features and Ecient semantic segmentation of scale Point Clouds -- CARR-Net: Leveraging on Subtle Variance of Neighbors for Point Cloud Semantic Segmentation -- 3D Meteorological Radar Data Visualization with Point Cloud Completion and Poisson Surface Reconstruction -- JVLDLoc: a Joint Optimization of Visual-LiDAR Constraints and Direction Priors for Localization in Driving Scenario -- A Single-pathway Biomimetic Model for Potential Collision Prediction -- PilotAttnNet: Multi-Modal Attention Network for End-to-End Steering Control -- Stochastic Navigation Command Matching for Imitation Learning of a Driving Policy -- Recognition, Remote Sensing -- Group Activity Representation Learning with Self-Supervised Predictive Coding -- Skeleton-Based Action Quality Assessment via Partially Connected LSTM with Triplet Losses --Hierarchical Long-Short Transformer for Group Activity Recognition --GNN-based structural dynamics simulation for modular buildings --Semantic-Augmented Local Decision Aggregation Network for Action Recognition -- Consensus-Guided Keyword Targeting for Video Captioning -- Handwritten Mathematical Expression Recognition via GCAttention- Based Encoder and Bidirectional Mutual Learning Transformer -- Semi- and Self-Supervised Learning for Scene Text Recognition with Fewer Labels -- TMCR: A Twin Matching Networks for Chinese Scene Text Retrieval -- Thai Scene Text Recognition with Character Combination -- Automatic Examination Paper Scores Calculation and Grades Analysis Based on OpenCV -- Efficient License Plate Recognition via Parallel Position-aware Attention -- Semantic-Aware Non-Local Network for Handwritten Mathematical Expression Recognition -- Math Word Problem Generation with Memory Retrieval -- Traditional Mongolian Script Standard Compliance Testing Based on Deep Residual Network and Spatial Pyramid Pooling -- FOV Recognizer: Telling the Field of View of Movie Shots -- Multi-Level Temporal Relation Graph for Continuous Sign Language Recognition.-Beyond Vision: A Semantic Reasoning Enhanced Model for Gesture Recognition with Improved Spatiotemporal Capacity -- SemanticGAN: Facial Image Editing with Semantic to Realize Consistency -- Least-squares Estimation of Keypoint Coordinate for Human Pose Estimation -- Joint Pixel-level and Feature-level Unsupervised Domain Adaptation for Surveillance Face Recognition -- Category-oriented Adversarial Data Augmentation via Statistic Similarity for Satellite Images -- A Multiscale Convolutional Neural Network Based on Multilevel Wavelet Decomposition for Hyperspectral Image Classification -- High Spatial Resolution Remote Sensing Imagery Classification Based on Markov Random Field Model Integrating Granularity and Semantic Feature --Feature Difference Enhancement Fusion for Remote Sensing Image Change Detection -- WAFormer Ship Detection in SAR Images Based on Window-aware Swin-Transformer -- EllipseloU: A General Metric for Aerial Object Detection -- Transmission tower detection algorithm based on feature-enhanced convolutional network in remote sensing image -- Vision Analysis and Understanding -- Mining Diverse Clues with Transformers for Person Re-identification -- Mutual Learning Inspired Prediction Network for Video Anomaly Detection -- Weakly Supervised Video Anomaly Detection with Temporal and Abnormal Information -- Towards Class Interpretable Vision Transformer with Multi-Class-Tokens -- Multimodal Violent Video Recognition based on Mutual Distillation -- YFormer: a New Transformer Architecture for Video-guery Based Video Moment Retrieval -- Hightlight Video Detection in Figure Skating -- Memory Enhanced Spatial-Temporal Graph Convolutional Autoencoder for Human-related Video Anomaly Detection -- Background Suppressed and Motion Enhanced Network for

Weakly Supervised Video Anomaly Detection -- Dirt Detection and Segmentation Network for Autonomous Washing Robots -- Finding Beautiful and Happy Images for Mental Health and Well-being Applications -- Query-UAP: Query-ecient Universal Adversarial Perturbation for Large-scale Person Re-Identification Attack -- Robust Person Re-identification with Adversarial Examples Detection and Perturbation Extraction -- Self-Supervised and Template-Enhanced Unknown-Defect Detection -- JoinTW: A Joint Image-to-Image Translation and Watermarking Method.

## Sommario/riassunto

The 4-volume set LNCS 13534, 13535, 13536 and 13537 constitutes the refereed proceedings of the 5th Chinese Conference on Pattern Recognition and Computer Vision, PRCV 2022, held in Shenzhen, China, in November 2022. The 233 full papers presented were carefully reviewed and selected from 564 submissions. The papers have been organized in the following topical sections: Theories and Feature Extraction; Machine learning, Multimedia and Multimodal; Optimization and Neural Network and Deep Learning; Biomedical Image Processing and Analysis; Pattern Classification and Clustering; 3D Computer Vision and Reconstruction, Robots and Autonomous Driving; Recognition, Remote Sensing; Vision Analysis and Understanding; Image Processing and Low-level Vision; Object Detection, Segmentation and Tracking.