1. Record Nr. UNISA996465331803316 Pattern Recognition [[electronic resource]]: 31st DAGM Symposium, **Titolo** Jena, Germany, September 9-11, 2009, Proceedings / / edited by Joachim Denzler, Gunther Notni, Herbert Süße Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-642-03798-4 Edizione [1st ed. 2009.] Descrizione fisica 1 online resource (XV, 564 p.) Collana Image Processing, Computer Vision, Pattern Recognition, and Graphics; : 5748 Classificazione **DAT 770f** SS 4800 004 Disciplina Soggetti Pattern recognition Optical data processing Computer graphics User interfaces (Computer systems) Artificial intelligence Pattern Recognition Computer Imaging, Vision, Pattern Recognition and Graphics Image Processing and Computer Vision Computer Graphics User Interfaces and Human Computer Interaction Artificial Intelligence Jena (2009) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Motion and Tracking -- A 3-Component Inverse Depth Nota di contenuto Parameterization for Particle Filter SLAM -- An Efficient Linear Method for the Estimation of Ego-Motion from Optical Flow -- Localised Mixture Models in Region-Based Tracking -- A Closed-Form Solution for Image Sequence Segmentation with Dynamical Shape Priors --

Markerless 3D Face Tracking -- Pedestrian Recognition and Automotive

Applications -- The Stixel World - A Compact Medium Level

Representation of the 3D-World -- Global Localization of Vehicles Using Local Pole Patterns -- Single-Frame 3D Human Pose Recovery from Multiple Views -- Dense Stereo-Based ROI Generation for Pedestrian Detection -- Pedestrian Detection by Probabilistic Component Assembly -- High-Level Fusion of Depth and Intensity for Pedestrian Classification -- Features -- Fast and Accurate 3D Edge Detection for Surface Reconstruction -- Boosting Shift-Invariant Features -- Harmonic Filters for Generic Feature Detection in 3D --Increasing the Dimension of Creativity in Rotation Invariant Feature Design Using 3D Tensorial Harmonics -- Training for Task Specific Keypoint Detection -- Combined GKLT Feature Tracking and Reconstruction for Next Best View Planning -- Single-View and 3D Reconstruction -- Non-parametric Single View Reconstruction of Curved Objects Using Convex Optimization -- Discontinuity-Adaptive Shape from Focus Using a Non-convex Prior -- Making Shape from Shading Work for Real-World Images -- Learning and Classification --Deformation-Aware Log-Linear Models -- Multi-view Object Detection Based on Spatial Consistency in a Low Dimensional Space -- Active Structured Learning for High-Speed Object Detection -- Face Reconstruction from Skull Shapes and Physical Attributes -- Sparse Bayesian Regression for Grouped Variables in Generalized Linear Models -- Learning with Few Examples by Transferring Feature Relevance -- Pattern Recognition and Estimation -- Simultaneous Estimation of Pose and Motion at Highly Dynamic Turn Maneuvers --Making Archetypal Analysis Practical -- Fast Multiscale Operator Development for Hexagonal Images -- Optimal Parameter Estimation with Homogeneous Entities and Arbitrary Constraints -- Detecting Hubs in Music Audio Based on Network Analysis -- A Gradient Descent Approximation for Graph Cuts -- Stereo and Multi-view Reconstruction -- A Stereo Depth Recovery Method Using Layered Representation of the Scene -- Reconstruction of Sewer Shaft Profiles from Fisheye-Lens Camera Images -- A Superresolution Framework for High-Accuracy Multiview Reconstruction -- View Planning for 3D Reconstruction Using Time-of-Flight Camera Data -- Real Aperture Axial Stereo: Solving for Correspondences in Blur -- Real-Time GPU-Based Voxel Carving with Systematic Occlusion Handling -- Image-Based Lunar Surface Reconstruction -- Image Analysis and Applications -- Use of Coloured Tracers in Gas Flow Experiments for a Lagrangian Flow Analysis with Increased Tracer Density -- Reading from Scratch – A Vision-System for Reading Data on Micro-structured Surfaces -- Diffusion MRI Tractography of Crossing Fibers by Cone-Beam ODF Regularization --Feature Extraction Algorithm for Banknote Textures Based on Incomplete Shift Invariant Wavelet Packet Transform -- Video Super Resolution Using Duality Based TV-L 1 Optical Flow -- HMM-Based Defect Localization in Wire Ropes – A New Approach to Unusual Subsequence Recognition -- Beating the Quality of JPEG 2000 with Anisotropic Diffusion -- Decoding Color Structured Light Patterns with a Region Adjacency Graph -- Residual Images Remove Illumination Artifacts! -- Superresolution and Denoising of 3D Fluid Flow Estimates -- Spatial Statistics for Tumor Cell Counting and Classification --Segmentation -- Quantitative Assessment of Image Segmentation Quality by Random Walk Relaxation Times -- Applying Recursive EM to Scene Segmentation -- Adaptive Foreground/Background Segmentation Using Multiview Silhouette Fusion -- Evaluation of Structure Recognition Using Labelled Facade Images -- Using Lateral Coupled Snakes for Modeling the Contours of Worms -- Globally Optimal Finsler Active Contours.

of the German Association for Pattern Recognition, DAGM 2009, held in Jena, Germany, in September 2009. The 56 revised full papers were carefully reviewed and selected from numerous submissions. The papers are organized in topical sections on motion and tracking; pedestrian recognition and automotive applications; features; single-view and 3D reconstruction; learning and classification; pattern recognition and estimation; stereo and multi-view reconstruction; image analysis and applications; and segmentation.