Record Nr. UNISA996466232403316

Computer vision - ECCV 2002 . Part 1 : 7th European Conference on **Titolo** 

Computer Vision, Copenhagen, Denmark, May 28-31, 2002,

proceedings / / Anders Heyden [and three others] (editors)

Berlin:,: Springer,, [2002] Pubbl/distr/stampa

©2002

**ISBN** 3-540-47969-4

Edizione [1st ed. 2002.]

Descrizione fisica 1 online resource (XXVIII, 820 p.)

Collana Lecture notes in computer science;; 2350

Disciplina 006.37

Soggetti Computer vision

Lingua di pubblicazione Inglese

**Formato** Materiale a stampa

Livello bibliografico Monografia

Note generali Includes index.

Nota di bibliografia Includes bibliographical references and index.

Nota di contenuto Active and Real-Time Vision -- Tracking with the EM Contour

Algorithm -- M2Tracker: A Multi-View Approach to Segmenting and Tracking People in a Cluttered Scene Using Region-Based Stereo --Image Features -- Analytical Image Models and Their Applications --Time-Recursive Velocity-Adapted Spatio-Temporal Scale-Space Filters -- Combining Appearance and Topology for Wide Baseline Matching --Guided Sampling and Consensus for Motion Estimation -- Image Features / Visual Motion -- Fast Anisotropic Gauss Filtering --Adaptive Rest Condition Potentials: Second Order Edge-Preserving Regularization -- An Affine Invariant Interest Point Detector --Understanding and Modeling the Evolution of Critical Points under Gaussian Blurring -- Image Processing Done Right -- Multimodal Data Representations with Parameterized Local Structures -- The Relevance of Non-generic Events in Scale Space Models -- The Localized Consistency Principle for Image Matching under Non-uniform Illumination Variation and Affine Distortion -- Resolution Selection Using Generalized Entropies of Multiresolution Histograms -- Robust Computer Vision through Kernel Density Estimation -- Constrained Flows of Matrix-Valued Functions: Application to Diffusion Tensor Regularization -- A Hierarchical Framework for Spectral Correspondence -- Phase-Based Local Features -- What Is the Role of

Independence for Visual Recognition? -- A Probabilistic Multi-scale

Model for Contour Completion Based on Image Statistics -- Toward a Full Probability Model of Edges in Natural Images -- Fast Difference Schemes for Edge Enhancing Beltrami Flow -- A Fast Radial Symmetry Transform for Detecting Points of Interest -- Image Features Based on a New Approach to 2D Rotation Invariant Quadrature Filters --Representing Edge Models via Local Principal Component Analysis --Regularized Shock Filters and Complex Diffusion -- Multi-view Matching for Unordered Image Sets, or "How Do I Organize My Holiday Snaps?" -- Parameter Estimates for a Pencil of Lines: Bounds and Estimators -- Multilinear Analysis of Image Ensembles: TensorFaces --'Dynamism of a Dog on a Leash' or Behavior Classification by Eigen-Decomposition of Periodic Motions -- Automatic Detection and Tracking of Human Motion with a View-Based Representation -- Using Robust Estimation Algorithms for Tracking Explicit Curves -- On the Motion and Appearance of Specularities in Image Sequences -- Multiple Hypothesis Tracking for Automatic Optical Motion Capture -- Single Axis Geometry by Fitting Conics -- Computing the Physical Parameters of Rigid-Body Motion from Video -- Building Roadmaps of Local Minima of Visual Models -- A Generative Method for Textured Motion: Analysis and Synthesis -- Is Super-Resolution with Optical Flow Feasible? -- New View Generation with a Bi-centric Camera --Recognizing and Tracking Human Action -- Towards Improved Observation Models for Visual Tracking: Selective Adaptation -- Color-Based Probabilistic Tracking -- Dense Motion Analysis in Fluid Imagery -- A Layered Motion Representation with Occlusion and Compact Spatial Support -- Incremental Singular Value Decomposition of Uncertain Data with Missing Values -- Symmetrical Dense Optical Flow Estimation with Occlusions Detection -- Audio-Video Sensor Fusion with Probabilistic Graphical Models -- Visual Motion -- Increasing Space-Time Resolution in Video -- Hyperdynamics Importance Sampling -- Implicit Probabilistic Models of Human Motion for Synthesis and Tracking -- Space-Time Tracking.

Sommario/riassunto

Premiering in 1990 in Antibes, France, the European Conference on Computer Vision, ECCV, has been held biennially at venues all around Europe. These conferences have been very successful, making ECCV a major event to the computer vision community. ECCV 2002 was the seventh in the series. The privilege of organizing it was shared by three universities: The IT University of Copenhagen, the University of Copenhagen, and Lund University, with the conference venue in Copenhagen. These universities lie "geographically close in the vivid Oresund region, which lies partly in Denmark and partly in Sweden, with the newly built bridge (opened summer 2000) crossing the sound that formerly divided the countries. We are very happy to report that this year's conference attracted more papers than ever before, with around 600 submissions. Still, together with the conference board, we decided to keep the tradition of holding ECCV as a single track conference. Each paper was anonymously refereed by three different reviewers. For the ?nal selection, for the ?rst time for ECCV, a system with area chairs was used. These met with the program chairsinLundfortwodaysinFebruary2002toselectwhatbecame45oralprese ntations and 181 posters. Also at this meeting the selection was made without knowledge of the authors'identity.