1. Record Nr. UNISA996466164703316

Titolo	Advances in Visual Computing [[electronic resource]] : Second International Symposium, ISVC 2006, Lake Tahoe, NV, USA, November 6-8, 2006, Proceedings, Part I / / edited by Richard Boyle, Bahram Parvin, Darko Koracin, Ara Nefian, Gopi Meenakshisundaram, Valerio Pascucci, Jiri Zara, Jose Molineros, Holger Theisel, Tom Malzbender
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2006
ISBN	3-540-48631-3
Edizione	[1st ed. 2006.]
Descrizione fisica	1 online resource (XXXII, 920 p.)
Collana	Image Processing, Computer Vision, Pattern Recognition, and Graphics ; ; 4291
Disciplina	005.1
Soggetti	Software engineering Pattern recognition Optical data processing Artificial intelligence Computer graphics Algorithms Software Engineering/Programming and Operating Systems Pattern Recognition Image Processing and Computer Vision Artificial Intelligence Computer Graphics Algorithm Analysis and Problem Complexity
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Activity Recognition Via Classification Constrained Diffusion Maps -- Generating and Updating Textures for a Large-Scale Environment -- Planar Surface Detection in Image Pairs Using Homographic Constraints -- Robust Quality-Scalable Transmission of JPEG2000 Images over Wireless Channels Using LDPC Codes -- A Novelty Detection Approach for Foreground Region Detection in Videos with Quasi-stationary Backgrounds -- Procedural Image Processing for Visualization --

Tracking of Individuals in Very Long Video Sequences -- A Natural Interface for Sign Language Mathematics -- A Novel Gait Recognition Method Via Fusing Shape and Kinematics Features -- Illumination Normalization for Color Face Images -- Real-Time Detection of Out-of-Plane Objects in Stereo Vision -- Stereo Imaging with Uncalibrated Camera -- Global Hand Pose Estimation by Multiple Camera Ellipse Tracking -- Vision-Based Self-localization of Autonomous Guided Vehicle Using Landmarks of Colored Pentagons -- An Automated System for Contact Lens Inspection -- Efficient Motion Search in Large Motion Capture Databases -- Real-Time Rendering of Light Shafts on GPU -- Learning the Stylistic Similarity Between Human Motions -- Effects of Layer Partitioning in Collaborative 3D Visualizations -- GPU-Based Active Contour Segmentation Using Gradient Vector Flow -- Active Single Landmark Based Global Localization of Autonomous Mobile Robots -- Iterative Estimation of 3D Transformations for Object Alignment -- Temporal Alignment of Time Varying MRI Datasets for High Resolution Medical Visualization -- Physically Interacting with Four Dimensions -- Low Level Moving-Feature Extraction Via Heat Flow Analogy -- Shape Tracking and Registration for 4D Visualization of MRI and Structure -- History Trees as Descriptors of Macromolecular Structures -- Fusing Features in Direct Volume Rendered Images -- Binocular Uncalibrated Photometric Stereo -- Empirical Evaluation of a Visual Interface for Exploring Message Boards -- Direct Estimation of the Stereo Geometry from Monocular Normal Flows -- Singular Value Decomposition-Based Illumination Compensation in Video -- Facial Expression Transformations for Expression-Invariant Face Recognition -- A High-Speed Parallel Architecture for Stereo Matching -- Light Simulation in a Distributed Driving Simulator -- Self-adaptive RBF Neural Networks for Face Recognition -- An Improved Representation of Junctions Through Asymmetric Tensor Diffusion -- Accurate Extraction of Reciprocal Space Information from Transmission Electron Microscopy Images -- GPU Accelerated Isosurface Extraction on Tetrahedral Grids -- Enhancing Information on Large Scenes by Mixing Renderings -- Auto-focusing in Extreme Zoom Surveillance: A System Approach with Application to Faces -- Trifocal Transfer Based Novel View Synthesis for Micromanipulation -- Simulation of Diabetic Retinopathy Neovascularization in Color Digital Fundus Images -- Mesh Optimisation Using Edge Information in Feature-Based Surface Reconstruction -- Finite Sample Bias of Robust Scale Estimators in Computer Vision Problems -- Flexible Segmentation and Smoothing of DT-MRI Fields Through a Customizable Structure Tensor -- Using Visualizations to Support Design and Debugging in Virtual Reality -- Strategies for Part-Based Shape Analysis Using Skeletons -- Automatic Learning of Articulated Skeletons from 3D Marker Trajectories -- Real Time Hand Gesture Recognition Including Hand Segmentation and Tracking -- Physically-Based Real-Time Diffraction Using Spherical Harmonics -- 3D Segmentation of Mammospheres for Localization Studies -- Viewpoint Selection for Angiographic Volume -- Recognizing Action Primitives in Complex Actions Using Hidden Markov Models -- Polyhedrization of Discrete Convex Volumes -- Automatic Camera Calibration and Scene Reconstruction with Scale-Invariant Features -- Surface Fitting to Curves with Energy Control -- Blob Tracking with Adaptive Feature Selection and Accurate Scale Determination -- Self-Calibration with Two Views Using the Scale-Invariant Feature Transform -- Improved Face Recognition Using Extended Modular Principal Component Analysis -- Shape Reconstruction by Line Voting in Discrete Space -- Characterization of the Closest Discrete Approximation of a Line in the 3-Dimensional

Space -- Margin Maximizing Discriminant Analysis for Multi-shot Based Object Recognition -- A Novel 3D Statistical Shape Model for Segmentation of Medical Images -- Scale Consistent Image Completion -- EXDRAP: An Extended Dead Reckoning Architectural Pattern for the Development of Web-Based DVE Applications -- Optimal Parameterizations of Bézier Surfaces -- Constrained Delaunay Triangulation Using Delaunay Visibility -- Immersing Tele-operators in Collaborative Augmented Reality -- GrayCut – Object Segmentation in IR-Images -- Unsupervised Clustering of Shapes -- Markerless Pose Tracking for Augmented Reality -- Lip Detection Using Confidence-Based Adaptive Thresholding -- Optic Flow Integration at Multiple Spatial Frequencies – Neural Mechanism and Algorithm -- A Critical Appraisal of the Box Counting Method to Assess the Fractal Dimension of Tree Crowns -- 3D Surface Reconstruction and Registration for Image Guided Medialization Laryngoplasty -- Vision-Based User Interfaces for Health Applications: A Survey -- Multiple Hypothesis Target Tracking Using Merge and Split of Graph's Nodes -- Understanding 3D Emotions Through Compact Anthropometric Autoregressive Models -- Graph-Based Multi-resolution Temporal-Based Face Reconstruction -- Web-Based Interface for the Visualization of Microarray Data -- 3D and Texture Modelling of Precolombian Objects -- Segmentation of Triangular Meshes Using Multi-scale Normal Variation -- Integration of Multiple Methods for Class and Specific Object Recognition -- An Efficient Photon Mapping Algorithm for Rendering Light-Emitting Fluids -- Face Recognition Using 2D and 3D Multimodal Local Features -- Adaptive Background Generation for Video Object Segmentation -- Omnidirectional Camera Calibration and 3D Reconstruction by Contour Matching -- Real-Time GPU-Based Simulation of Dynamic Terrain -- High-Resolution Video from Series of Still Photographs.

Sommario/riassunto

It is with great pleasure that we welcome you all to the proceedings of the 2nd InternationalSymposiumonVisualComputing(ISVC2006) heldinLakeTahoe. Followinga successfulmeeting lastyear,wewitnesseda muchstrongerandmore productive event this year. ISVC o?ers a common umbrella for the four main areas of visual computing including vision, graphics, visualization, and virtual reality. Its goal is to provide a forum for researchers, scientists, engineers and practitionersthroughouttheworldtopresenttheirlatestresearch?ndings, ideas, developments and applications in the broader area of visual computing. This year, the program consisted of 13 oral sessions, one poster session, ten special tracks, and six keynote presentations. The response to the call for - pers was very strong. We received more than twice the papers received last year. Speci?cally, we received over 280 submissions for the main symposium from which we accepted 65 papers for oral presentation (23% acceptance) and 56 papers for poster presentation (20% acceptance). Special track papers were solicited separately through the Organizing and Program Committees of each track. A total of 57 papers were accepted for presentation in the special tracks. All papers were reviewed with an emphasis on potential to contribute to the state of the art in the ?eld. Selection criteria included accuracy and originality of ideas, clarity and signi?cance of results, and presentation quality. The review process was quite rigorous, involving two to three independent blind reviews followed by several days of discussion. During the discussion period we tried to correct anomalies and errors that might have existed in the initial reviews.