

| | |
|-------------------------|---|
| 1. Record Nr. | UNINA9910483152703321 |
| Titolo | Advances in Visual Computing : 6th International Symposium, ISVC 2010, Las Vegas, NV, USA, November 29-December 1, 2010, Proceedings, Part II // edited by Richard Boyle, Bahram Parvin, Darko Koracin, Ronald Chung, Hammoud, Muhammad Hussain, Kar-Han Tan, Roger Crawfis, Daniel Thalmann, David Kao, Lisa Avila |
| Pubbl/distr/stampa | Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2010 |
| ISBN | 1-280-39045-X 9786613568373 3-642-17274-1 |
| Edizione | [1st ed. 2010.] |
| Descrizione fisica | 1 online resource (XXXIII, 762 p. 382 illus.) |
| Collana | Image Processing, Computer Vision, Pattern Recognition, and Graphics, , 3004-9954 ; ; 6454 |
| Altri autori (Persone) | BebisGeorge |
| Disciplina | 005.1 |
| Soggetti | Software engineering Life sciences Pattern recognition systems Bioinformatics Computer graphics Image processing - Digital techniques Computer vision Software Engineering Life Sciences Automated Pattern Recognition Computational and Systems Biology Computer Graphics Computer Imaging, Vision, Pattern Recognition and Graphics |
| 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. |
| Nota di contenuto | Calibration, Pose Estimation, and Reconstruction -- Multiple Camera Self-calibration and 3D Reconstruction Using Pedestrians -- Robust Radial Distortion from a Single Image -- Projective Reconstruction of |

General 3D Planar Curves from Uncalibrated Cameras -- A Novel Photometric Method for Real-Time 3D Reconstruction of Fingerprint -- 3D Camera Pose Estimation Using Line Correspondences and 1D Homographies -- Near-Optimal Selection of Views and Surface Regions for ICP Pose Estimation -- Segmentation -- Region and Edge-Adaptive Sampling and Boundary Completion for Segmentation -- Universal Seed Skin Segmentation -- A Sharp Concentration-Based Adaptive Segmentation Algorithm -- Segmentation for Hyperspectral Images with Priors -- The Curve Filter Transform -- A Robust Method for Curve Enhancement -- Split Bregman Method for Minimization of Region-Scalable Fitting Energy for Image Segmentation -- Stereo -- A Correlation-Based Approach for Real-Time Stereo Matching -- Photometric Stereo under Low Frequency Environment Illumination -- Simultaneous Vanishing Point Detection and Camera Calibration from Single Images -- Inferring Planar Patch Equations from Sparse View Stereo Images -- Single Camera Stereo System Using Prism and Mirrors -- A Region-Based Randomized Voting Scheme for Stereo Matching -- Virtual Reality II -- Adaptive Neighbor Pairing for Smoothed Particle Hydrodynamics -- System Structures for Efficient Rendering in Virtual Worlds and Virtual Testbeds -- Prismfields: A Framework for Interactive Modeling of Three Dimensional Caves -- Efficient Marker Matching Using Pair-Wise Constraints in Physical Therapy -- Learning and Prediction of Soft Object Deformation Using Visual Analysis of Robot Interactions -- Registration -- A Novel Consistency Regularizer for Meshless Nonrigid ImageRegistration -- Robust Rigid Shape Registration Method Using a Level Set Formulation -- A Meshless Method for Variational Nonrigid 2-D Shape Registration -- A New Simple Method to Stitch Images with Lens Distortion -- Robust Mosaicking of Stereo Digital Elevation Models from the Ames Stereo Pipeline -- Medical Imaging -- Tissue Fate Prediction in Acute Ischemic Stroke Using Cuboid Models -- 3D Vector Flow Guided Segmentation of Airway Wall in MSCT -- Graph-Based Segmentation of Lymph Nodes in CT Data -- Electron Microscopy Image Segmentation with Graph Cuts Utilizing Estimated Symmetric Three-Dimensional Shape Prior -- Retinal Vessel Extraction with the Image Ray Transform -- Automatic Liver Segmentation from CT Scans Using Multi-layer Segmentation and Principal Component Analysis -- ST: Low Cost Virtual Reality: Expanding Horizons -- Low Cost VR Meets Low Cost Multi-touch -- IQ-Station: A Low Cost Portable Immersive Environment -- A Fiducial-Based Tangible User Interface for White Matter Tractography -- Immersive Molecular Visualization and Interactive Modeling with Commodity Hardware -- ST: Best Practices in Teaching Visual Computing -- Multi-institutional Collaboration in Delivery of Team-Project-Based Computer Graphics Studio Courses -- A Workflow Based Process Visual Analyzer (ProVisZer) for Teaching and Learning -- Teaching Geometric Modeling Algorithms and Data Structures through Laser Scanner Acquisition Pipeline -- Creating Passion for Augmented Reality Applications -- A Teaching Concept for a Lab Course -- Applications -- Object Material Classification by Surface Reflection Analysis with a Time-of-Flight Range Sensor -- Retrieving Images of Similar Geometrical Configuration -- An Analysis-by-Synthesis Approach to Rope Condition Monitoring -- Fast Parallel Model Estimation on the CellBroadband Engine -- Organizing and Browsing Image Search Results Based on Conceptual and Visual Similarities -- Evaluation of a Difference of Gaussians Based Image Difference Metric in Relation to Perceived Compression Artifacts -- Visualization II -- Distance Field Illumination: A Rendering Method to Aid in Navigation of Virtual Environments -- Indirect Shader Domain Rendering -- Visual

Exploration of Stream Pattern Changes Using a Data-Driven Framework -- RibbonView: Interactive Context-Preserving Cutaways of Anatomical Surface Meshes -- Interactive Visualisation of Time-Based Vital Signs -- Using R-Trees for Interactive Visualization of Large Multidimensional Datasets -- Combining Automated and Interactive Visual Analysis of Biomechanical Motion Data -- Video Analysis and Event Recognition -- Human Activity Recognition: A Scheme Using Multiple Cues -- A Platform for Monitoring Aspects of Human Presence in Real-Time -- Egocentric Visual Event Classification with Location-Based Priors -- View Invariant Activity Recognition with Manifold Learning -- Arm-Hand Behaviours Modelling: From Attention to Imitation -- Hand Detection and Gesture Recognition Exploit Motion Times Image in Complicate Scenarios -- Face Verification Using Indirect Neighbourhood Components Analysis -- Poster Session -- Efficient Algorithms for Image and High Dimensional Data Processing Using Eikonal Equation on Graphs -- 3D DCT Based Compression Method for Integral Images -- Plant Texture Classification Using Gabor Co-occurrences -- A Compressive Sensing Algorithm for Many-Core Architectures -- An Incremental PCA-HOG Descriptor for Robust Visual Hand Tracking -- Probabilistic Learning of Visual Object Composition from Attended Segments -- Propagating Uncertainty in Petri Nets for Activity Recognition -- Mixture of Gaussians Exploiting Histograms of Oriented Gradients for Background Subtraction -- Human Pose Recognition Using Chamfer Distance in Reduced Background Edge for Human-Robot Interaction -- Modeling Clinical Tumors to Create Reference Data for Tumor Volume Measurement -- Spectral Image Decolorization.

Sommario/riassunto

It is with great pleasure that we present the proceedings of the 6th International, Symposium on Visual Computing (ISVC 2010), which was held in Las Vegas, Nevada. ISVC provides a common umbrella for the four main areas of visual computing including vision, graphics, visualization, and virtual reality. The goal is to provide a forum for researchers, scientists, engineers, and practitioners throughout the world to present their latest research findings, ideas, developments, and applications in the broader area of visual computing. This year, the program consisted of 14 oral sessions, one poster session, 7 special tracks, and 6 keynote presentations. The response to the call for papers was very good; we received over 300 submissions for the main symposium from which we accepted 93 papers for oral presentation and 73 papers for poster presentation. Special track papers were solicited separately through the Organizing and Program Committees of each track. A total of 44 papers were accepted for oral presentation and 6 papers for poster presentation in the special tracks.
