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   Nota di contenuto   Invited Presentations -- Cumuli, Panorama, and Vanguard Project Overview -- Dualizing Scene Reconstruction Algorithms -- Multiview Relations and Correspondence Search -- Geometry of Multiple Affine Views -- Tensor Embedding of the Fundamental Matrix -- Optimal Estimation of Matching Constraints -- Matching and Reconstruction from Widely Separated Views -- Improving Block-Based Disparity Estimation by Considering the Non-uniform Distribution of the Estimation Error -- 3D Structure from Multiple Images -- Beyond the Epipolar Constraint: Integrating 3D Motion and Structure Estimation -- Multi-Camera Acquisitions for High-Accuracy 3D Reconstruction -- Metric 3D Surface Reconstruction from Uncalibrated Image Sequences -- Automatic 3D Model Construction for Turn-Table Sequences -- Calibration and Reconstruction Using Scene Constraints -- Geometrically Constrained Structure from Motion: Points on Planes -- Euclidean and Affine Structure/Motion for Uncalibrated Cameras from Affine Shape and Subsidiary Information -- From Ordinal to Euclidean

Reconstruction with Partial Scene Calibration -- Imposing Euclidean Constraints During Self-Calibration Processes -- Interactive 3D Modeling from Multiple Images Using Scene Regularities -- Range Integration and Augmented Reality Applications -- Integration of Multiple Range Maps through Consistency Processing -- Fitting Geometrical Deformable Models to Registered Range Images -- The Use of Reality Models in Augmented Reality Applications -- Applying Augmented Reality Techniques in the Field of Interactive Collaborative Design -- A Guided Tour Through Multiview Relations.

Sommario/riassunto	The contributions in this volume give an overview of state-of-the-art results presented at the Workshop on 3D Structure from Multiple Images of Lar- scale Environments (SMILE). This workshop was held in conjunction with the Fifth European Conference on Computer Vision 1998 in Freiburg, Germany. SMILE was a joint e ort of the European ACTS projects VANGUARD and PANORAMA and the Esprit projectCUMULI, all of which are involved in the analysis and reconstruction of 3D scenes from image sequences. The potential for 3D reconstructions of scenes and objects is tremendous. Much of the work reported here is to be seen especially against the background of a convergence between computer vision and computer graphics, and of a shift from signal-based to content-based image analysis in telecommunications. - cordingly,the requirementsfor 3D modelsand acquisitionsystemsarealso shi- ing. Visualization rather than mensuration is the primary issue. The perceptual qualityofthe models, the'exibility ofthe acquisition,andthe costofthe system are three driving forces in the search for new methods. The last few years have seen important steps toward genuine ?exibility. A case in point is the use of multiple images to generate 3D models, without an explicit knowledgeof the relativeposition of the camerasor the camera settings. The same developments also hold good promise to make 3D acquisition cheaper and more widely available.