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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Modeling Omnidirectional Vision Systems -- Calibration of Omnidirectional Cameras Using a DLT-Like Approach -- Comparison of Calibration Methods for Omnidirectional Cameras -- Two-View Relations Between Omnidirectional and Conventional Cameras -- Generic Scale Space for a Camera Invariant Feature Extractor -- Orientation of a Hand-Held Catadioptric System in Man-Made Environments -- Conclusions.
Sommario/riassunto	This work focuses on central catadioptric systems, from the early step of calibration to high-level tasks such as 3D information retrieval. The book opens with a thorough introduction to the sphere camera model, along with an analysis of the relation between this model and actual central catadioptric systems. Then, a new approach to calibrate any single-viewpoint catadioptric camera is described. This is followed by an analysis of existing methods for calibrating central omnivision systems, and a detailed examination of hybrid two-view relations that combine images acquired with uncalibrated central catadioptric systems and conventional cameras. In the remaining chapters, the book discusses a new method to compute the scale space of any omnidirectional image acquired with a central catadioptric system, and

a technique for computing the orientation of a hand-held
omnidirectional catadioptric camera.
