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Autore	Scharstein Daniel
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	A Survey of Image-Based Rendering and Stereo -- View Synthesis -- Re-evaluating Stereo -- Gradient-Based Stereo -- Stereo Using Diffusion -- Conclusion.
Sommario/riassunto	Image-based rendering, as an area of overlap between computer graphics and computer vision, uses computer vision techniques to aid in sythesizing new views of scenes. Image-based rendering methods are having a substantial impact on the field of computer graphics, and also play an important role in the related field of multimedia systems, for applications such as teleconferencing, remote instruction and surgery, virtual reality and entertainment. The book develops a novel way of formalizing the view synthesis problem under the full perspective model, yielding a clean, linear warping equation. It shows new techniques for dealing with visibility issues such as partial occlusion and "holes". Furthermore, the author thoroughly re-evaluates the requirements that view synthesis places on stereo algorithms and introduces two novel stereo algorithms specifically tailored to the application of view synthesis.