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Titolo	Design and Implementation of Real-Time Multi-Sensor Vision Systems / / by Vladan Popovic, Kerem Seyid, Ömer Cogal, Abdulkadir Akin, Yusuf Leblebici
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ISBN	3-319-59057-X
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Descrizione fisica	1 online resource (257 pages) : illustrations (some color)
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Soggetti	Electronic circuits Signal processing Image processing Speech processing systems Electronics Microelectronics Circuits and Systems Signal, Image and Speech Processing Electronics and Microelectronics, Instrumentation
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Chapter 1.Introduction -- Chapter 2.State-of-the-Art Multi-Camera Systems -- Chapter 3.Panorama Construction Algorithms -- Chapter 4. Omnidirectional Multi-Camera Systems Design -- Chapter 5. Miniaturization of Multi-Camera Systems -- Chapter 6.Interconnected Network of Cameras -- Chapter 7.Towards Real-Time Gigapixel Video -- Chapter 8.Binocular and Trinocular Disparity Estimation -- Chapter 9.Real-Time Image Registration via Optical Flow Calculation -- Chapter 10. Computational Imaging Applications.-Chapter 11. Conclusion.
Sommario/riassunto	This book discusses the design of multi-camera systems and their application to fields such as the virtual reality, gaming, film industry, medicine, automotive industry, drones, etc.The authors cover the basics of image formation, algorithms for stitching a panoramic image from multiple cameras, and multiple real-time hardware system

architectures, in order to have panoramic videos. Several specific applications of multi-camera systems are presented, such as depth estimation, high dynamic range imaging, and medical imaging.