MACHINE VISION

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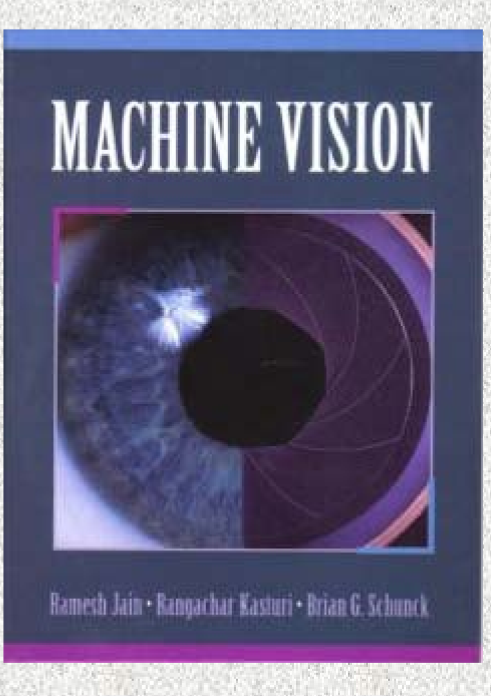

The field of machine vision, or computer vision, has been growing at a fast pace. As in most fast-developing fields, not all aspects of machine vision that are of interest to active researchers are useful to the designers and users of a vision system for a specific application.

This text is intended to provide a balanced introduction to machine vision. Basic concepts are introduced with only essential mathematical elements. The details to allow implementation and use of vision algorithm in practical application are provided, and engineering aspects of techniques are emphasized. This text intentionally omits theories of machine vision that do not have sufficient practical applications at the time.

This book is designed for people who want to apply machine vision to solve problems.

Chapter Index:

Machine Vision in Mobile Devices Market 2020 SWOT Analysis by Players: Motorola Inc, CEVA Inc, Samsung, Apple Inc, MediaTek Inc, Huawei The Haitian-Caribbean News Network â€œmachine visionâ€ â€“ Google News. Read More. News. Machine Vision Market Report 2020, Size, Share, SWOT Analysis and Forecast â€“ Murphyâ€™s Hockey Law. Machine Vision Market Report 2020, Size, Share, SWOT Analysis and Forecast Murphyâ€™s Hockey Law â€œmachine visionâ€ â€“ Google News. Read More. News. Machine vision, a combination of hardware and software that work together to help machines â€œseeâ€ something and then act, is prevalent in business today. With the support of artificial intelligence algorithms along with vision, machines automatically do many things only humans were able to do. â€¢ What is Machine Vision â€“ Machine vision is the substitution of the human visual sense and judgment capabilities with a video camera and computer to perform an inspection task. It is the automatic acquisition and analysis of images to obtain desired data for controlling or evaluating a specific part or activity. â€“ Key Points: â€¢ Automated/Nonâ€Contact â€¢ Acquisition â€¢ Analysis â€¢ Data. Introduction and Overview. â€¢ What is Machine Vision. Image Acquisition. â€¢Sensors â€¢Optics â€¢Lighting. Machine vision is the application of computer vision to factory automation. Just as human inspectors working on assembly lines visually inspect parts to judge the quality of workmanship, so machine vision systems use digital cameras and image processing software to perform similar inspections. A machine vision system is a computer that makes decisions based on the analysis of digital images.