Intelligent Vision Systems for Industry

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Book Condition: New. Publisher/Verlag: Springer, Berlin | The application of intelligent imaging techniques to industrial vision problems is an evolving aspect of current machine vision research. Machine vision is a relatively new technology, more concerned with systems engineering than with computer science, and with much to offer the manufacturing industry in terms of improving efficiency, safety and product quality. Beginning with an introductory chapter on the basic concepts, the authors develop these ideas to describe intelligent imaging techniques for use in a new generation of industrial imaging systems. Sections cover the application of AI languages such as Prolog, the use of multi-media interfaces and multi-processor systems, external device control, and colour recognition. The text concludes with a discussion of several case studies that illustrate how intelligent machine vision techniques can be used in industrial applications.

1 Basic Concepts.- 1.1 Industrial Vision Systems.- 1.1.1 Justification.- 1.1.2 Limitations of Present Systems.- 1.1.3 Flexible Manufacturing Systems.- 1.1.4 Process Control.- 1.2 Systems Engineering.- 1.2.1 Importance of Context.- 1.2.2 Industrial Examples.- 1.3 Intelligent Vision.- 1.3.1 Heuristics and Algorithms.- 1.3.2 Artificial Intelligence (AI) Languages.- 1.4 Book Outline.- 2 Basic Machine Vision Techniques.- 2.1 Representations of Images.- 2.2 Elementary Image Processing Functions.- 2.2.1 Monadic, Point-by-point Operators.-

Reviews

Merely no words to describe. I have got study and i am confident that i am going to planning to go through yet again once again in the foreseeable future. You will like just how the writer compose this publication.

-- Devante Schmitt

Complete guideline! Its this sort of excellent read. I could comprehended every little thing out of this written e publication. Its been designed in an remarkably easy way and it is only right after i finished reading this publication by which really transformed me, affect the way i think.

-- Prof. Shanie Schinner Sr.