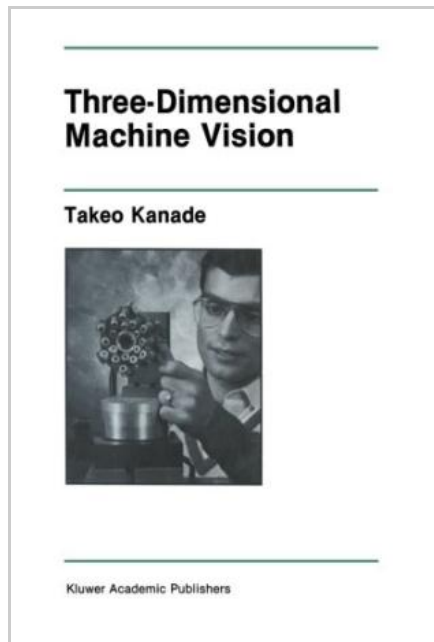




Three-dimensional Machine Vision (Paperback)

By Takeo Kanade

Springer-Verlag New York Inc., United States, 2011. Paperback. Book Condition: New. 240 x 160 mm. Language: English . Brand New Book ***** Print on Demand *****. A robot must perceive the three-dimensional world if it is to be effective there. Yet recovering 3-D information from projected images is difficult, and still remains the subject of basic research. Alternatively, one can use sensors that can provide three-dimensional range information directly. The technique of projecting light-stripes started to be used in industrial object recognition systems as early as the 1970s, and time-of-flight laser-scanning range finders became available for outdoor mobile robot navigation in the mid-eighties. Once range data are obtained, a vision system must still describe the scene in terms of 3-D primitives such as edges, surfaces, and volumes, and recognize objects of interest. Today, the art of sensing, extracting features, and recognizing objects by means of three-dimensional range data is one of the most exciting research areas in computer vision. Three-Dimensional Machine Vision is a collection of papers dealing with three-dimensional range data.

The authors are pioneering researchers: some are founders and others are bringing new excitements in the field. I have tried to select milestone papers, and my goal has been to make this book a reference work for researchers in three-dimensional vision. The book is organized into four parts: 3-D Sensors, 3-D Feature Extractions, Object Recognition Algorithms, and Systems and Applications. Part I includes four papers which describe the development of unique, capable 3-D range sensors, as well as discussions of optical, geometrical, electronic, and computational issues. Mundy and Porter describe a sensor

Reviews

It is an amazing publication which i actually have at any time go through. It really is written in easy words and phrases rather than hard to understand. Its been developed in an extremely easy way which is merely following i finished reading through this pdf in which actually changed me, affect the way i think.

-- **Garry Lind**

I just started looking over this ebook. I could possibly comprehend everything out of this published e publication. You are going to like the way the author compose this publication.

-- **Giles Vandervort DDS**