

Three-dimensional Machine Vision (Paperback)

Three-Dimensional Machine Vision

Takeo Kanade



Kluwer Academic Publishers

Filesize: 6.04 MB

Reviews

This book is fantastic. It is really simplistic but surprises inside the 50 percent of the publication. I am just happy to inform you that here is the very best publication i have read through inside my individual life and can be he greatest book for actually.
(Everette Luettgen)

THREE-DIMENSIONAL MACHINE VISION (PAPERBACK)

[DOWNLOAD](#)

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 excitement to 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 system based on structured illumination for inspecting metallic castings. In order to achieve high-speed data acquisition, it uses multiple lightstripes with wavelength multiplexing. Case, Jalkio, and Kim also present a multi-stripe system and discuss various design issues in range sensing by triangulation. The numerical stereocamera developed by Altschuler, Bae, Altschuler, Dijak, Tamburino, and Woolford projects space-coded grid patterns which are generated by an electro-optical programmable spatial viii PREFACE light modulator. Kanade and Fuhrman present a proximity sensor using multiple LEDs which are conically arranged. It can measure both distance and orientation of an object surface. Softcover reprint of the original 1st ed. 1987.

[Read Three-dimensional Machine Vision \(Paperback\) Online](#)[Download PDF Three-dimensional Machine Vision \(Paperback\)](#)

You May Also Like

**Serenade for Winds, Op. 44 / B. 77: Study Score (Paperback)**

Petrucci Library Press, United States, 2013. Paperback. Book Condition: New. 240 x 166 mm. Language: English . Brand New Book ***** Print on Demand *****.Dvorak composed this deservedly popular work 1878 shortly after the premiere...

[Save Book »](#)**The Noon Witch, Op. 108 / B. 196: Study Score (Paperback)**

Petrucci Library Press, United States, 2013. Paperback. Book Condition: New. 240 x 168 mm. Language: English . Brand New Book ***** Print on Demand *****.The third of the four late tone poems inspired by Bouquet,...

[Save Book »](#)**Adobe PhotoShop Creative Cloud Revealed Update (Mixed media product)**

Cengage Learning, Inc, United States, 2013. Mixed media product. Book Condition: New. 240 x 194 mm. Language: English . Brand New Book. Your Adobe Creative Cloud package includes two components: 1) Online access to Adobe...

[Save Book »](#)**Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English] (Paperback)**

Createspace, United States, 2013. Paperback. Book Condition: New. 254 x 178 mm. Language: English . Brand New Book ***** Print on Demand *****.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to...

[Save Book »](#)**Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English] (Paperback)**

Createspace, United States, 2013. Paperback. Book Condition: New. 248 x 170 mm. Language: English . Brand New Book ***** Print on Demand *****.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to...

[Save Book »](#)