



Fundamentals of Three-dimensional Digital Image Processing (Hardback)

By Junichiro Toriwaki, Hiroyuki Yoshida

Springer London Ltd, United Kingdom, 2009. Hardback. Condition: New. Language: English . Brand New Book. This book is a detailed description of the basics of three-dimensional digital image processing. A 3D digital image (abbreviated as 3D image below) is a digitalized representation of a 3D object or an entire 3D space, stored in a computer as a 3D array. Whereas normal digital image processing is concerned with screens that are a collection of square shapes called pixels and their corresponding density levels, the image plane in three dimensions is represented by a division into cubical graphical elements (called voxels) that represent corresponding density levels. In the context of image processing, in many cases 3D image processing will refer to the input of multiple 2D images and performing processing in order to understand the 3D space (or scene) that they depict. This is a result of research into how to use input from image sensors such as television cameras as a basis for learning about a 3D scene, thereby replicating the sense of vision for humans or intelligent robots, and this has been the central problem in image processing research since the 1970s. However, a completely different type of image with its own new problems, the 3D digital image discussed...



READ ONLINE
[6.56 MB]

Reviews

Thorough guide! Its this sort of excellent read. It is really simplified but unexpected situations in the 50 % in the book. You are going to like just how the blogger create this publication.

-- Prof. Lela Steuber

This pdf is really gripping and exciting. Yes, it is actually perform, nevertheless an amazing and interesting literature. I am just effortlessly can get a pleasure of looking at a published pdf.

-- Tony Dickens