



2d Object Detection and Recognition: Models, Algorithms, and Networks (Hardback)

By Yali Amit

MIT Press Ltd, United States, 2002. Hardback. Book Condition: New. New.. 229 x 185 mm. Language: English . Brand New Book. Two important subproblems of computer vision are the detection and recognition of 2D objects in gray-level images. This book discusses the construction and training of models, computational approaches to efficient implementation, and parallel implementations in biologically plausible neural network architectures. The approach is based on statistical modeling and estimation, with an emphasis on simplicity, transparency, and computational efficiency. The book describes a range of deformable template models, from coarse sparse models involving discrete, fast computations to more finely detailed models based on continuum formulations, involving intensive optimization. Each model is defined in terms of a subset of points on a reference grid (the template), a set of admissible instantiations of these points (deformations), and a statistical model for the data given a particular instantiation of the object present in the image. A recurring theme is a coarse to fine approach to the solution of vision problems. The book provides detailed descriptions of the algorithms used as well as the code, and the software and data sets are available on the Web.



READ ONLINE
[5.87 MB]

Reviews

Certainly, this is the greatest work by any author. It can be written in easy words and phrases rather than confusing. I am just happy to let you know that this is actually the greatest ebook we have studied inside my individual daily life and may be the greatest ebook for at any time.

-- **Trent Monahan**

This publication could be worth a read through, and far better than other. This is certainly for all those who state there was not a worth reading through. You may like just how the author composed this publication.

-- **Dr. Kayley Kovacek PhD**