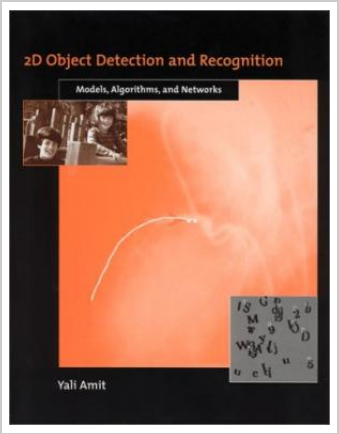

2D Object Detection and Recognition: Models, Algorithms, and Networks (Hardback)

By Yali Amit

MIT Press Ltd, United States, 2002. Hardback. Condition: New. Language: English. Brand new Book. A guide to the computer detection and recognition of 2D objects in gray-level images.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.

Reviews

Thorough information! Its this type of great go through. It is amongst the most incredible publication i actually have read through. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- ***Germaine Welch***

A very awesome pdf with perfect and lucid information. This is certainly for those who statte there had not been a worthy of looking at. Your daily life span will probably be convert as soon as you full looking at this book.

-- ***Dr. Marie Ebert***