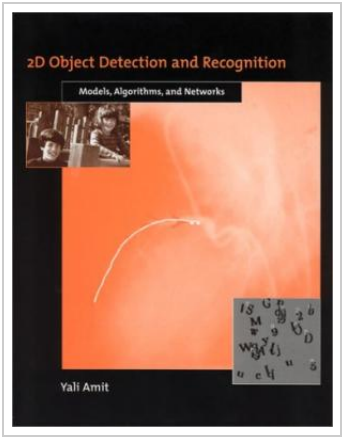

2D Object Detection and Recognition: Models, Algorithms, and Networks (Hardback)

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

Very helpful to all type of individuals. It really is rally interesting throgh looking at time. Its been designed in an extremely basic way which is just soon after i finished reading this pdf through which basically modified me, change the way i believe.

-- ***Tyshawn Brekke***

The publication is easy in read through preferable to fully grasp. It is writter in simple phrases instead of hard to understand. You will not sense monotony at at any moment of your respective time (that's what catalogs are for concerning if you request me).

-- ***Kevin Bergstrom Sr.***