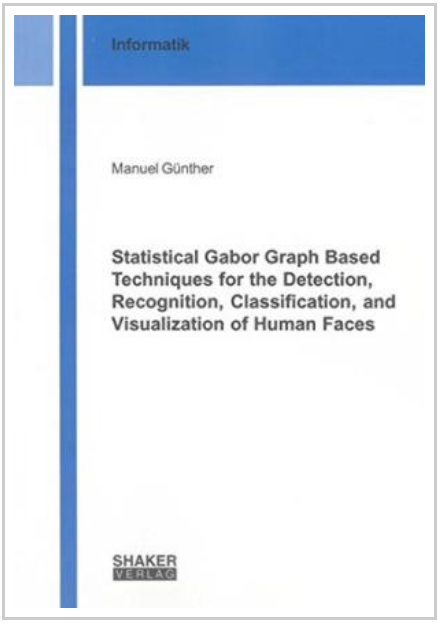

Statistical Gabor Graph Based Techniques for the Detection, Recognition, Classification, and Visualization of Human Faces

By Manuel Günther

Shaker Verlag Mai 2012, 2012. Buch. Book Condition: Neu. 21x14.8x cm. Neuware - In this work, I focus in a simple parameter-free statistical model that requires few training data and can be trained fast. I show that the model is well suited for face detection, person identification, and classification of facial properties. For face detection, the well known elastic bunch graph matching algorithm is adapted to learn appearance probabilities of facial features. Furthermore, texture features are transformed to be used for the detection of faces in different sizes and in-plane rotation angles. In order to place facial landmarks more reliably and to increase face recognition accuracy, images are automatically standardized according to the found scale and angle of the face. It is shown that both extensions of the elastic bunch graph matching algorithm work well with only few hand-labeled training examples and that the face detection can be accelerated. After applying small changes to the model, it can be employed for identifying a person that is shown in an image. In opposition to other state-of-the-art identification algorithms, the model learns how two facial images can be compared most reasonably. For both the intrapersonal and the extrapersonal class, each one statistical...

Reviews

Complete guideline! Its this type of great read through. it absolutely was writtern quite perfectly and helpful. I am very happy to explain how this is basically the best book i actually have read through during my personal life and can be he very best book for at any time.

-- ***Joshua Gerhold PhD***

A very awesome book with perfect and lucid reasons. It really is basic but shocks within the 50 percent of the book. Its been designed in an exceptionally easy way and is particularly merely right after i finished reading this ebook where in fact changed me, change the way i think.

-- ***Meagan Roob***