
New Technology Offer

Object Recognition

Object recognition for industrial data and image processing

Description

Because of the wide range of application areas – e.g. industrial, military or medical image processing as well as economic data processing – the importance of pattern recognition in linear statistical series is growing rapidly. Some of the most important recognition challenges that are based on linear statistical series are associated with the classification of arbitrary objects by their shape in the area of industrial image processing.

Still, today's methods are barely able to recognize partly covered objects or overlapping objects. In addition, scaling and rotation variants remain a great problem.

Application

- Recognizing arbitrary objects in videos or photographs by their shape
- Quality control or process flow controlling of production processes
- Human-computer interaction e.g. recognition of hand gestures for navigation of computers or robots
- Analysis of medical images and data e.g. in tumor diagnostic, counting erythrocytes, monitoring the heart rhythm
- Recognition or count of creatures, automobiles or aeroplanes

Advantages

- Recognition of arbitrary objects by giving examples
- Recognition of partly covered or overlapping objects
- Regulation of sensitivity according to requirements, e.g. face recognition or classification of objects
- Simulation of the human perception
- Inexpensive prototype available (PC and standard webcam)

Status quo

German patent granted in 2005 / PCT-Application filed.

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