The Applications of High Order Correlation Method To Image and Form

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ABSTRACT

This thesis focuses on the way of spread and application for the basic theory of the traditional high order correlation method. The high order correlation method was originally proposed for detecting point target tracks in three-dimensional space. The spatio-temporal cross correlation is computed formation from binary images. Based upon the simulations on real data, it was shown that the method provides good target detection rate and clutter rejection rate, even under very low signal-to- noise ratio. The assumption form this problem is also minimized which resolves many restrictions created by the conventional approaches. The high order correlation method can be applied to two-dimensional images with only minor modification. Directly approve the practical application for this method is used in the trace detection, no matter detecting binary image or gray image The reason for above application is that the character of the connection for the organization of the point target.Those automatically documentation processing have been contained the classification of document table, and also the determination and support the System of document classification to delete table grid; the detection of Image Character is included the edge detection,line detection, and spot detection. We will proof the Reality, Correction, and Efficiency for above topics in this thesis. Besides, as for the high order correlation method has been approved to execute by the structure of Neuro Net, it will be easier to improve the speed of executing and could get the result of real time and multiprocess.

Keywords : high order correlation ; grid analysis ; image analysis ; edge detection ; line detection ; spot detection ; OCR

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