Classification and Evaluation of Algorithms for Detection and Recognition Procedures of Objects in Remote-Sensing Images¹

Abo obida M. Eihassan ²	Hassan Abo alnour ³
Mohammaed Rogia ⁴	

Abstract

The development in means and techniques of obtaining Remote-sensing data with its different applications and types represent a motive for researchers in studying all problems related to detection and recognition of natural and artificial resources, and also then the evaluation of these resources, and then managing and investing.

Different kinds of processing techniques and algorithms, for detection and recognition, are used. Those algorithms attained good results that have a great influence and effective contribution in developing and investing image processing and Remote-sensing sciences.

The recognition of detection techniques and automatic recognition of objects in images is a very serious problem. Beside that the classification of algorithms used in these techniques, the evaluation of its performance, and putting its merits and defects, are very important things for researchers in this field.

In this paper, we present an analytical proposal for some modern techniques of detection and automatic recognition of objects in Remotesensing images. Then we present an empirical test that contribute in the classification of these algorithms. This research contribut to exhibiting the merits and defects of each one, then determining the appropriate techniques for different application, and helping in developing a new and distinctive algorithm for detection and recognition.

<u>Keywords :</u> Signal Processing, Image processing , Detection & Recognition & Identification, Computer Vision.

¹ For the paper in Arabic see pages (101-129).

² Dept. of Electronic, Faculty of Mechanical and Electrical Engineering.

³ Prof. Dept. of Electronic, Faculty of Mechanical and Electrical Engineering.

⁴ General Manger of Goors- Syria.