

Facility Detection from Image Using Mathematical Morphology

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Abstract : As high resolution satellite images can be used, lots of studies are carried out for exploiting these images in various fields. This paper proposes the method based on mathematical morphology for extracting the 'horse's hoof shaped object'. This proposed method can make an automatic object detection system to track the meaningful object in a large satellite image rapidly. Mathematical morphology process can apply in binary image, so this method is very simple. Therefore this method can easily extract the 'horse's hoof shaped object' from any images which have indistinct edges of the tracking object and have different image qualities depending on filming location, filming time, and filming environment. Using the proposed method by which 'horse's hoof shaped object' can be rapidly extracted, the performance of the automatic object detection system can be improved dramatically.

Keywords : facility detection, satellite image, object, mathematical morphology

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