BEACH LITTER MONITORING USING THE NETWORK CAMERA AND IMAGE PROCESSING

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KEY WORDS: Beach Litter, Monitoring, Network Camera, Image Processing.

ABSTRACT: This study was attempted to develop techniques for continuous monitoring of beach litter. The two network cameras have been installed on the Heungnam beach, Geoje Island, Gyeongsangnam-do, Korea and 24 hour non-stop image recording. As the first step for beach litters monitoring from acquired image, it was performed calibration and geometric correction for two camera lens. After removing distortion component through geometric correction, total shooting area of two cameras are deducted by correct pixel coordinates. To extract beach litter from calibrated image, background subtraction and morphological image processing is applied on scope of photograph of Cameras. As a result of this, beach litters in target area of two cameras are detected successfully.