PENGARUH PEMILIHAN ARAH KETETANGGAAN PIKSEL DALAM PROSES WATERMARKING PADA METODE TRANSFORMASI INTEGER

Helmie Arif Wibawa Program Studi Teknik Informatika FMIPA UNDIP Jl. Prof. Soedarto, SH, Semarang, 50275 e-mail: helmie.arif@undip.ac.id

Abstract. Integer transformation as one of the reversible watermarking method can be used to embed the information into the image and be able to recover the original image. This method works on a single color layer by using properties of inter-pixel neighborhood. This paper discusses the influence of the direction selection of the neighborhood when assigning a pair of pixels to the number of saved bits, the maximum payload of quantity and quality of the watermarked image. The tested image is RGB color images. In the observations, the watermarking process performed on the two possible directions then analyze PSNR values of the watermarked image and quantity of data space to embed the information.

Keywords: integer transformation method, PSNR, reversible watermarking.