

# **Abstract**

**Maha A. Sharkas**

## **An adaptive image watermarking algorithm employing the DWT**

Watermarking of intellectual properties is receiving increasing interest in the field of ownership authentication. The techniques of image watermarking have been matured enough so that it could be applied in several practical applications. Useable watermarks can range from a simple PN sequence to gray-level even color images. They could be embedded in the host image either in the spatial domain alternatively in any other domain. In this paper, a robust image watermarking algorithm that employs wavelet transform is proposed. The host image and the watermark are first wavelet transformed, before adding weighted coefficients of the watermark to their corresponding ones in the host image at all wavelet sub-bands. The weights are Selected adaptively based on the statistical properties of the host image