

BLOCK-LEVEL SECURE STEGANOGRAPHY SCHEME USING HIGH FREQUENCY COORDINATES

POONAM, KIRAN JOT SINGH & DIVNEET SINGH KAPOOR

Department of Electronics & Communication Engineering, Chandigarh University, Punjab, India

ABSTRACT

A technique for information security has been proposed in this paper. Steganography is a technique which hides data in digital media so as not to stimulate an eavesdropper's doubt. Digital media includes image, audio, video etc. An important thing to notice about this technique is that, it does not let any third party to know that any data is hidden. Only the sender and intended recipient could view the information. In this paper, Bit Insertion Technique is used to hide data that is to be sent. Data is being hidden in high frequency areas as well as in non-edge areas. Reason of hiding data in edges is that any alterations made in edge areas of an image are invisible to the naked human eye. Presented algorithm preserves the quality of image after hiding data in terms of PSNR. Experimental results show that proposed method caters both high embedding capacity and preserves the visual quality of the stego image.

KEYWORDS: Steganography, Least Significant Bit (LSB), Bit Level Block (BLB), Embedding, Peak Signal-to-Noise Ratio (PSNR), Human Visual System (HVS), Edges