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"Um Estudo sobre a Influência das Famílias Wavelets na Compressão de Imagem "

Uncompressed multimedia data as graphics, audio and video require a considerable storage capacity and transmission bandwidth on telecommunications systems. In despite of the development of the storage technology, high performance of processors and digital communication systems, the demand for these technologies is higher than the available capacity. Nowadays, the growth of multimedia-based web applications need more efficient ways to encode signals and images. So data compression is important to storage and communication technology. One of the promissing techniques is the wavelet compression, now used by the image format file JPEG 2000. This work seeks to describe the wavelet image compression technique. We will see some wavelet family bases like Haar, Daubechies, Biorthogonal, Coiflets and Symlets. They are used to compress a group of images. The target of the work is to define which bases present the best and the worst compression quality, through avaliation qualitative and quantitative functions: Root Mean Square Error (RMSE), Sign Noise Ratio (SNR) and Peak Sign Noise Ratio (PSNR).