
Image denosing method on basis of large-scale analysis

© L.L. Volkova

Bauman Moscow State Technical University, Moscow, 105005, Russia

Basing on advantages of multiresolutional analysis it is possible to perform noise filtering by taking into consideration specific character of signal. In application to images a denoising method has been designed, a wavelet transform coefficients histogram being used while filtering to evaluate the threshold basing on part of influence of filtered transform coefficients on the signal. The designed method has been tested, its efficiency has been experimentally proved in comparison with standard methods, and the recommendations on filtering parameters selection are given.

Keywords: *wavelet transform, multiresolutional analysis, de-noising, thresholding, digital signal processing, wavelet, filtering, noise, image.*

Volkova L.L. (b. 1988) graduated Bauman Moscow State Technical University in 2012. Assistant of the Software and Informational Technologies Department of Bauman Moscow State Technical University. Scientific interests: computational linguistics, multiresolutional analysis, wavelet analysis, digital signal processing, decision theory, neural networks, genetic algorithms, theory of formal languages. e-mail: lvolkova@hse.ru