In many applications, such as astronomy, remote sensing, medical imaging, military detection, public security, and video technology, images are the main sources of information. But, due to some reasons, observed images are degraded. The degradations are mainly caused by blur and noise. The aim of image restoration is to obtain restored image which should be as close as the original image. Wavelet transforms and neural networks have proven to be very efficient and effective in analyzing a very wide class of signals and phenomena. Wavelet expansion allows a more accurate local description and separation of signal characteristics. Here image processing is introduced for industrial applications in automatic visual inspection system because visual inspection system is not able to identify the small flaws in the industrial products.

References


Index Terms

Computer Science

Image Processing

Keywords

Image Restoration, Degradation model, Wavelet Neural Network