A Comparative Study of Some Denoising Methods for Preprocessing in Microarray Image

Liviu Teodor CHIRA, Raul MĂLUȚAN

Abstract

The microarray technology is used for study of thousands of gene in the same time. It consists of a listing series of thousands of microscopic spots of DNA oligonucleotides, each containing picomoles of a specific DNA sequence. This paper presents a comparative study for preprocessing step in spot intensity identification for microarray images. The used images have large dimensions, for the current experiment we use images with 1024*1024 pixels affected by Gaussian and Shot noises. For the study, we apply different denoising filters to the microarray images and we consider their effect.