Abstract
Speckle noise is a multiplicative noise that results from random fluctuations of signals when they are reflected on a surface. This research article proposes a technique to reduce speckle noise by using classic statistical filters and a size-adaptive window. The advantage of using the mentioned window is that such filters show adequate performance at reducing noise and preserving edges. In fact, the results show that the measurement of absolute performance that can be obtained with this window is better than the best results when the window is not used. Such better performance is expressed in terms of the signal / noise ratio, the edge improvement index and the mean square error.

Keywords
Speckle noise, Nonlinear filters, adaptive filter, image enhancement.