# Denoising with Non-Local Means

## The Non-Local Means Algorithm

Non-local means is an image denoising algorithm based on a simple principal – taking the average of similar pixels to that being denoised, this method is a relatively recent development in Image Processing algorithms and techniques, especially in comparison to the more traditional image denoising using local kernels (taking weighted averages of directly neighbouring pixels).

On a continuous image, non-local means

## Implementations of Non-Local Means

## Algorithm Parameters

## Strengths and Limitations

## Modifications of the Main Algorithm

## Applications of Non-Local Means

# References

[1]

Buades, Antoni, Bartomeu Coll, and Bartomeu Morel. 2011. “Non-Local Means Denoising.” *Image Processing On Line.*