**PIMA project M1 : Traditional or generative method for spine image denoising?**

Magnetic resonance images (MRI) are subject to patient movements during acquisition, leading to blurry or noisy images and generating a constraint on their interpretation. This is a specific drawback for spinal cord images, where respiratory movements may hind a lesion in this particular little structure. Support vector machine face challenges in debluring images due to the lack of ground truth data [1]. Generative-based implementation, such as DANet, or DeblurGAN have demonstrated effectiveness in denoising images through generative adversarial processes [2, 3].

However despite the availability of numerous methods a comprehensive comparison of the debluring methods on spinal MRI images has never been conducted. In this project you will implement a SVM approach for debluring images from [4, 5] and compare with metrics its results with those from the use of a generative approach.

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# References


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