Correction to “Comparison and Validation of Tissue Modelization and Statistical Classification Methods in T1-Weighted MR Brain Images”

In [1], the web addresses for O. Cuisenaire and J.-P. Thiran were misidentified. These should have read as http://itswww.epfl.ch and http://lts5www.epfl.ch, respectively.

In Section III-A, the initialization step should have read as follows. 

Initialization Step: Choose the best initialization for \( \theta_0 \).

Section VI-A (Global Performance) should have read as follows.

There is no global winner as the most suitable tissue classification technique for T1-MR brain image. In fact, if we define the best classification as the one with the highest percentage of correct classified voxels, as in Fig. 7, the optimal method varies depending on the noise (N) and in-homogeneity (RF) levels present in the images. For low noise levels (N \( \leq 3\% \)), no method clearly outperforms the others. However, for higher noise levels (N \( \geq 5\% \)), D-GPV-HMRF almost always performs the best classification, closely followed by B-GHMRF, whose performance differs by less than 2%. In [46], methods are also compared by allowing small errors such as confusing a pure tissue with a PV containing it or confusing a PV voxel with one of its pure tissues. In this case, C-GPV and D-GPV-HMRF, both methods using the PV equation, have the lowest error rates for low and high noise levels, respectively. However, differences are less than 1%.

The final paragraph of Section VI-B (Robustness to Noise and Inhomogeneities) should have read as follows.

Solid lines represent all methods using local spatial priors, which present similar behaviors with noise and bias. With no bias field, RF = 0, \( \text{pergood} \) decreases proportionally to the increase of noise. For RF = 20, there is no decrease of quality but almost a constant \( \text{pergood} \). Finally, for RF = 40, the \( \text{pergood} \) actually increases for high noise levels. The reason for this unexpected behavior is that—in the presence of a strong bias field—low noise levels (N \( \leq 3\% \)) are not realistically modeled by Gaussian distributions.

REFERENCES


Correction to “Biventricular Myocardial Strains via Nonrigid Registration of Anatomical NURBS Models”

The title of [1] became corrupt during production. The title should have read Biventricular Myocardial Strains via Nonrigid Registration of Anatomical NURBS Model.

REFERENCES