Deep-Learning-Based Image Registration for Medical Data

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Abstract

Deep-learning-based algorithms and in particular convolutional neural networks, have become a methodology of choice for many medical imaging application as segmentation or classification. In the field of deep-learning based registration, however, relatively few work has been presented so far.

In this talk, we aim to explain this gap and show the difficulties of deep-learning-based image registration. We will present different strategies to solve the problem, discuss the advantages of using deep-learning-based image registration and show some examples and results.