Brain Segmentation in Rodent MR-Images Using Convolutional Neural Networks - DTU Orbit (11/10/2019)

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This study compares two different methods for the task of brain segmentation in rodent MR-images, a convolutional neural network (CNN) and majority voting of a registration based atlas (RBA), and how limited training data affect their performance. The CNN was implemented in Tensorflow. The RBA performs better on average when using a training set with fewer than 20 images but the CNN achieves a higher median dice-score with a training set of 19 images.

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