

Computational Modelling for Biomedical Imaging - Individual Report

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April 9, 2015

Task 1

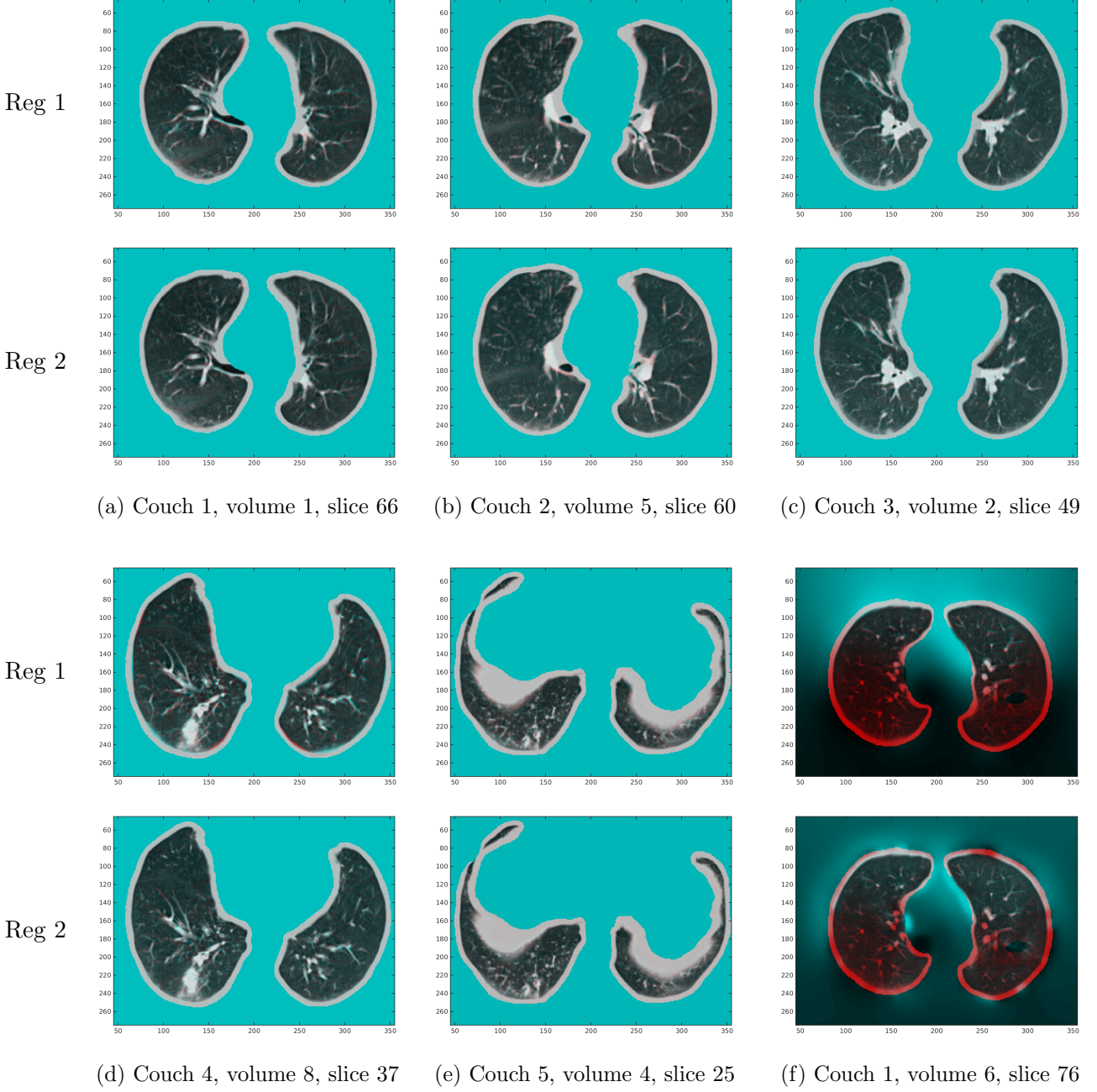


Figure 1: Registration results at several different slices and volumes for each couch position. For each subfigure, registration 1 and 2 are shown in the upper and lower figures respectively.

Figure 1 shows the registration results for a few representative slices and volumes over all couch positions. Both registrations perform equally well subfigures (1a - 1e), but yielded a bad registration in subfigure 1f. Similar bad registrations have been observed in the last slice of each volume. The images show us that there is a considerable ammount of respiratory motion across different slices which needs to be modelled. The shape of the lung is also dramatically different across different couch positions, reaching a concave shape at couch 5. Nevertheless, the segmentation and registration worked fine even for these slices.

Task 2

Task 3

Task 4

Task 5

Advanced tasks