Slicer3 Tutorial

Registration Library Case 05: Knee MRI: model/surface registration

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Introduction

• We have knee MRI images from two separate individuals, incl. segmented femur and tibia from which surface models have been created.

• We seek to roughly align the two spaces for purposes of using presegmented atlases as initial estimates for segmentation.

• Because the MRI images themselves provide insufficient contrast for a robust registration, we use the surface models to determine the affine transform.

subject 1  subject 2
Surface based alignment

Open the **Surface Registration** module
Surface based alignment

Femur model for subject 1

Femur model for subject 2
Surface Registration

Input Surface: S02_femur
Target Surface: S01_femur
Output Transform: Xf1_surf_S2-S1
Results

Data Module:
Move S02_femur.stl inside the new transform node to see the result (see animated gif below)
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