Baby Brain Toolkit

Fbrain ERC project: Computational Anatomy of Fetal Brain

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1 Introduction

1.1 Copyright

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1.2 Dependencies and Compilation

Baby Brain Toolkit (BTK) depends on:

- the most recent version of the Insight ToolKit (ITK) – www.itk.org.

- The Tclap library: this library can be installed for debian-based distribution using the following command line : `apt-get install libtclap-dev`

- OpenMP library: this library can be installed for debian-based distribution using the following command line : `apt-get install libgomp1`

2 Applications

btkNLMDenoising This program applies a non-local mean filter to a 3D image for denoising purpose. Usage: `-i input_image_filename -o output_image_filename`. Better results can be obtained by using a mask (or a padding value).

btkNLMDenoising4DImage This program applies a non-local mean filter to each 3D image of a 4D image, for denoising purpose. Usage: `-i input_image_filename -o output_image_filename`. Better results can be obtained by using a mask (or a padding value).

3   Utilities

btkModifyImageUsingLookUpTable This program modifies one image using a look up table defined in a ascii file (2 columns, one for the original values, one for the final values). Usage: `-i input_image_filename -t input_table_filename -o output_image_filename`

Acknowledgment