BRAINS ABC Publication ready

Project Information

Project Name:	Get ready for BRAINSABC publication

Goal of Project

The ultimate goal is a publication of BRAINS ABC, bias field correction too, through out experimental comparison to the Atropos:

1. Code revision to support for multiple images of same modality (small differences).
2. Atropos running scheme
3. Plan for comparison including data selection, criteria for comparison, and more.

If the script is ready, HBM conference (Abstract due is usually January) will be the target.

Current Project Status/Notes

Reading materials and running small tests to familiarize to BRAINSABC code/results.

Timeline/Milestones

- 01/27/2013 First experimental setup
- 01/31/2013 First Draft with Blank Experimental Results
- 02/01/2013 Experimental setup finish up
- 02/07/2013 Second Draft with completed method section
- 02/09/2013 First round of experimental result
- 02/13/2013 Experimental write up with draft of discussion
- 02/16/2013 Finish up add-up experiments
- 02/20/2013 First completed draft
- **02/23/2013 First review by Hans**
- 02/25/2013 Second revision
- 02/28/2013 Final revision
- **03/01/2013 Submission**

Jira

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Child pages

Items pending

Deliverables:

1. Working code of BRAINSABC for multiple images of same modality that is really similar
2. Method description of BRAINSABC
3. Experimental section prooving BRAINSABC performace
    a. Compare Affine and Syn (Tentative)
    b. Compare to Atropos (Tentative)
4. Publication submission to MICCAI 2013

Materials

- Avants, B. B., Tustison, N. J., Wu, J., Cook, P. a, & Gee, J. C. (2011). An open source multivariate framework for n-tissue segmentation with evaluation on public data. *Neuroinformatics*, *9*(4), 381-400. doi:10.1007/s12021-011-9109-y
- Lorenzen, P., Prastawa, M., Davis, B., Gerig, G., Bullitt, E., & Joshi, S. (2006). Multi-modal image set registration and atlas formation. *Medical image analysis*, *10*(3), 440-51. doi:10.1016/j.media.2005.03.002
- Prastawa, M., Bullitt, E., Moon, N., Van Leemput, K., & Gerig, G. (2003). Automatic brain tumor segmentation by subject specific modification of atlas priors1. *Academic Radiology*, *10*(12), 1341-1348. doi:10.1016/S1076-6332(03)00506-3
- Prastawa, M., & Gilmore, J. (2004). Automatic segmentation of neonatal brain MRI. *Medical Image Computing and ...*, 10-17. Retrieved from http://www.springerlink.com/index/ENYFGRR6YYLFCAM6.pdf
- Prastawa, M., Gilmore, J. H., Lin, W., & Gerig, G. (2005). Automatic segmentation of MR images of the developing newborn brain. *Medical image analysis*, *9*(5), 457-66. doi:10.1016/j.media.2005.05.007

Ultimate Project Goal

Ultimate project goal is to submission to MICCAI 2013 of as a methodology paper.