Subject: Re: ROI outlining of 3D volumes (multi-slice 2D) Posted by David Fanning on Mon, 28 Apr 2008 19:02:09 GMT

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stefan writes:

- > I need to create a tool that allows fast outlining of multi-slice MRI
- > data. XROI is rather nice but only allows 2D arrays. Rather than re-
- > inventing the wheel, I'd like to ask whether someone has done
- > something similar before and is willing to share. Ideally, I'd like a
- > tool to
- > allow the definition of (multiple) ROIs,
- > saving and retrieving them,
- > as well as windowing (contrast/brightness adjustment) of the
- > underlying image,
- > all while paging through multiple slices of the image stack.

I'm not sure about "sharing", but if you were talking about "buying" I have something that could be whipped into shape for you pretty easily.

This little application takes an MRI image stack and allows the user to quickly outline a region of interest on the image. An active contour then "snugs up" the contour around the region of interest. The user (or technician in this case) can then "edit" the fit, as required. When all is ready, the contour is then applied to the next image, active contouring is applied, etc. The data inside the ROI is set aside for further statistical processing, etc.

It was designed to be used by a lab technician in a clinical setup and seemed to work about as well as expected.

Cheers,

David

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David Fanning, Ph.D. Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: http://www.dfanning.com/

Sepore ma de ni thui. ("Perhaps thou speakest truth.")