Visualization tool

Pycortex: python-based tool for surface visualization of fMRI data

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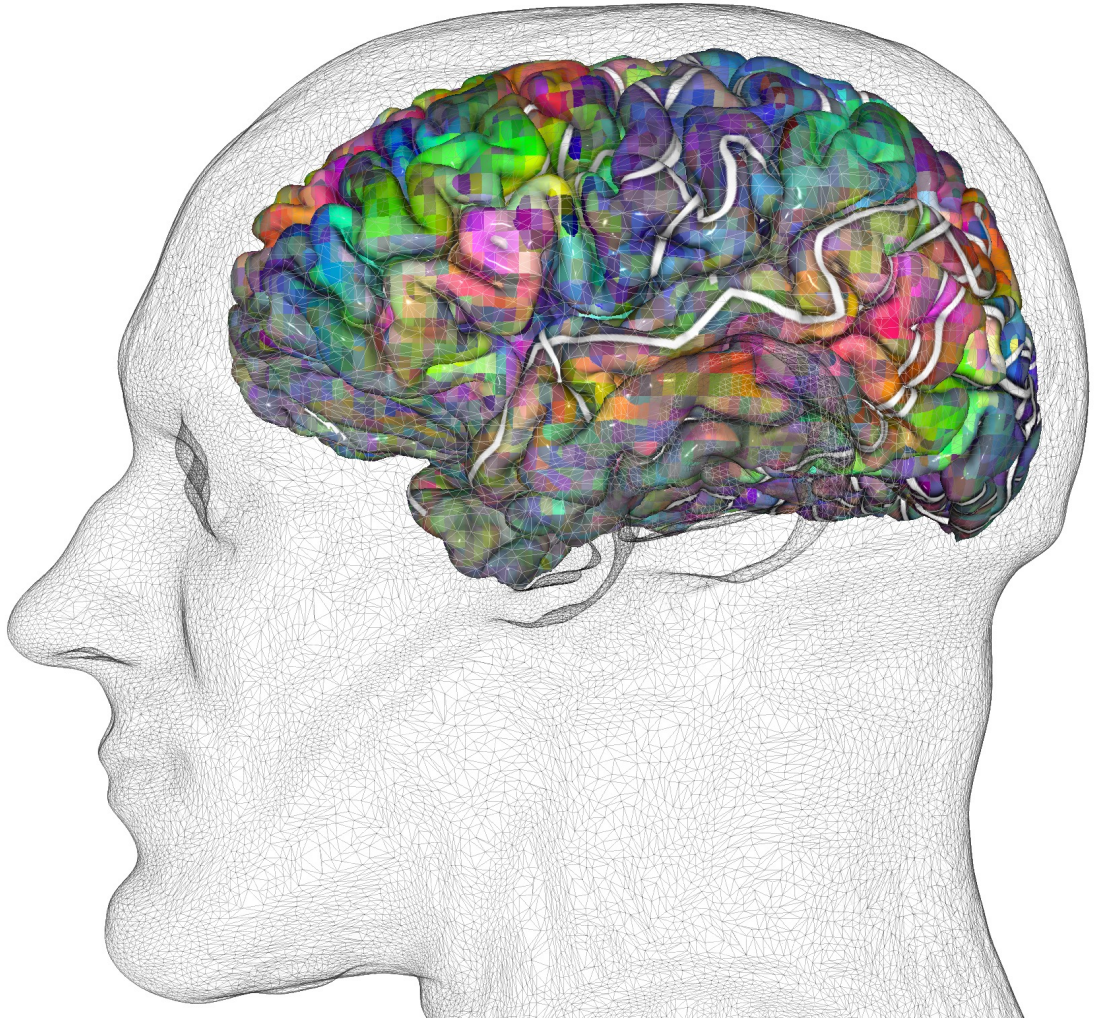
Intro

"Pycortex is a software package for generating beautiful interactive **3D visualizations** of fMRI data projected onto cortical surface models. It can also generate high quality **2D flattened** cortical visualizations."

surface ⇆ flat



https://gallantlab.github.io/pycortex/

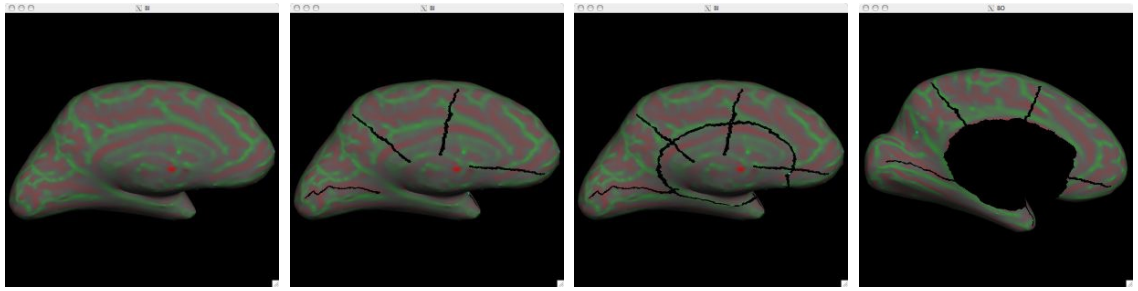
Preparation: Surface segmentation & Flattening

- Surface segmentation

: Create surfaces for your subject.
(Freesurfer “recon-all” command)

- Cutting & flattening

: Create flat maps
- Cutting (Tksurfer)
- Flattening



https://openwetware.org/wiki/Beauchamp:FreeSurfer

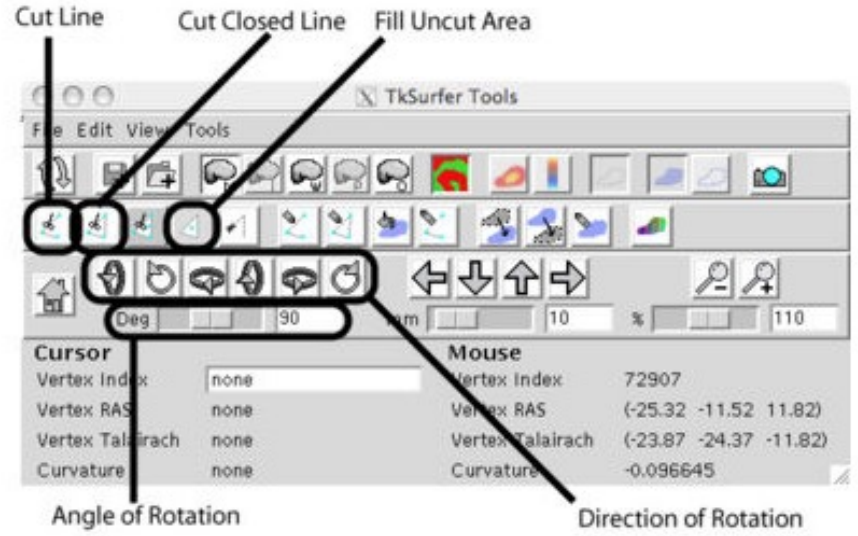
Creating Flat Maps

Creating Patch

Run tksurfer to define cuts for either the right hemisphere (rh) or left hemisphere (lh):

```
tksurfer subjID $h inflated
```

The important buttons on the TkSurfer window are shown below:



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- Importing into the Pycortex database

→ flatmaps allow us to visualize brain data in a more intuitive way than voxelized 3D images of brain data.

Download link: https://github.com/eigenz1/Pycortex_tutorial

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