

QuantCT - the ALS Plugin in a nutshell

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What is it?

- ▶ it is a plugin for fiji - at NERSC, use machine Euclid, load fiji and go to menu plugins - you want the option **QuantCT**;
- ▶ a prototype that may fail - don't get frustrated, contact Dani - dushizima@lbl.gov
- ▶ still presenting race conditions
- ▶ this code was customized to binary classification of microCt data
- ▶ there is no guarantee the code will work for other types of data than stacks of microCT, although I found many cases
- ▶ **Select rois and input text information first, click ENTER button last!**

2. What's the path followed by this plugin?

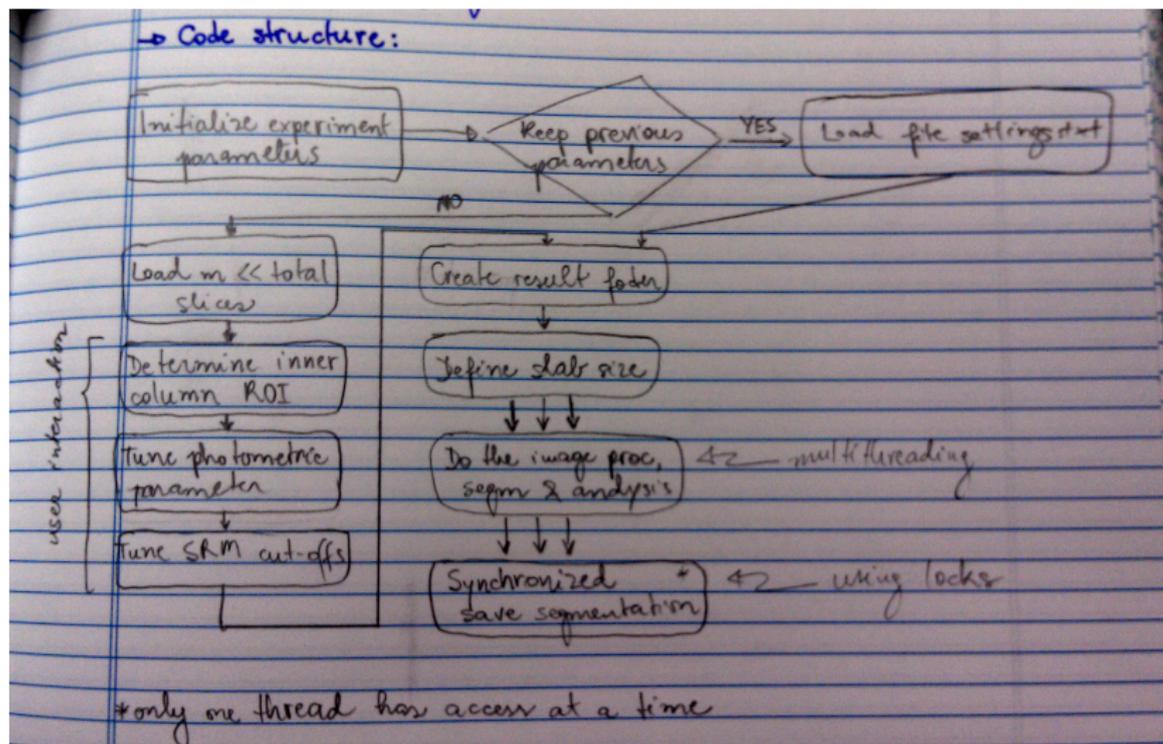


Figure: Code Description

2.1. The gateway to the plugin

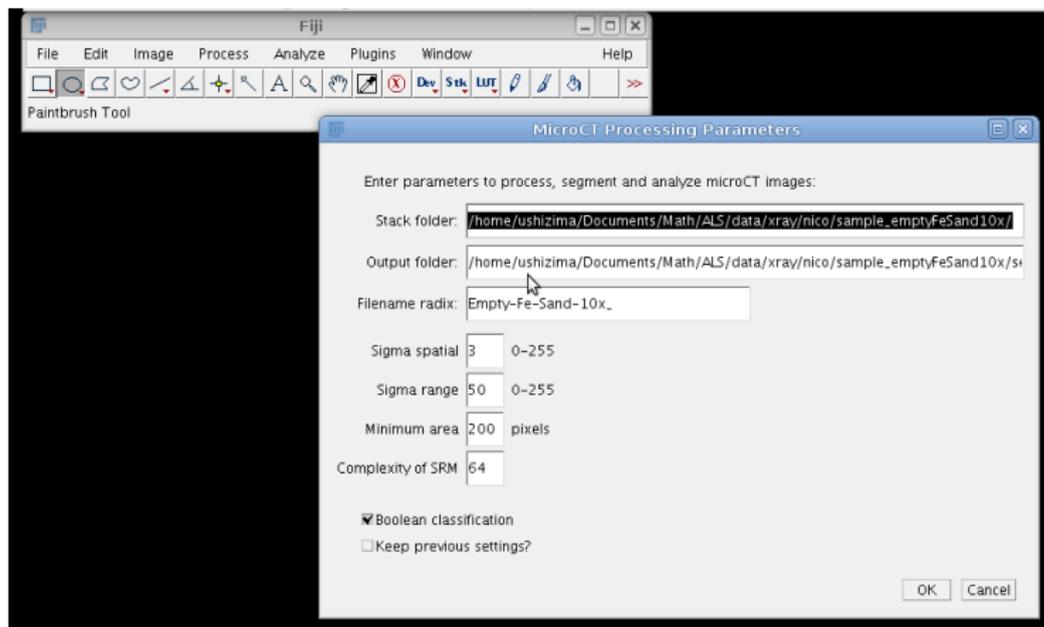


Figure: Enter where the plugin can find your data and where to save the segmentation results

2.1. The 1st screen for user interaction

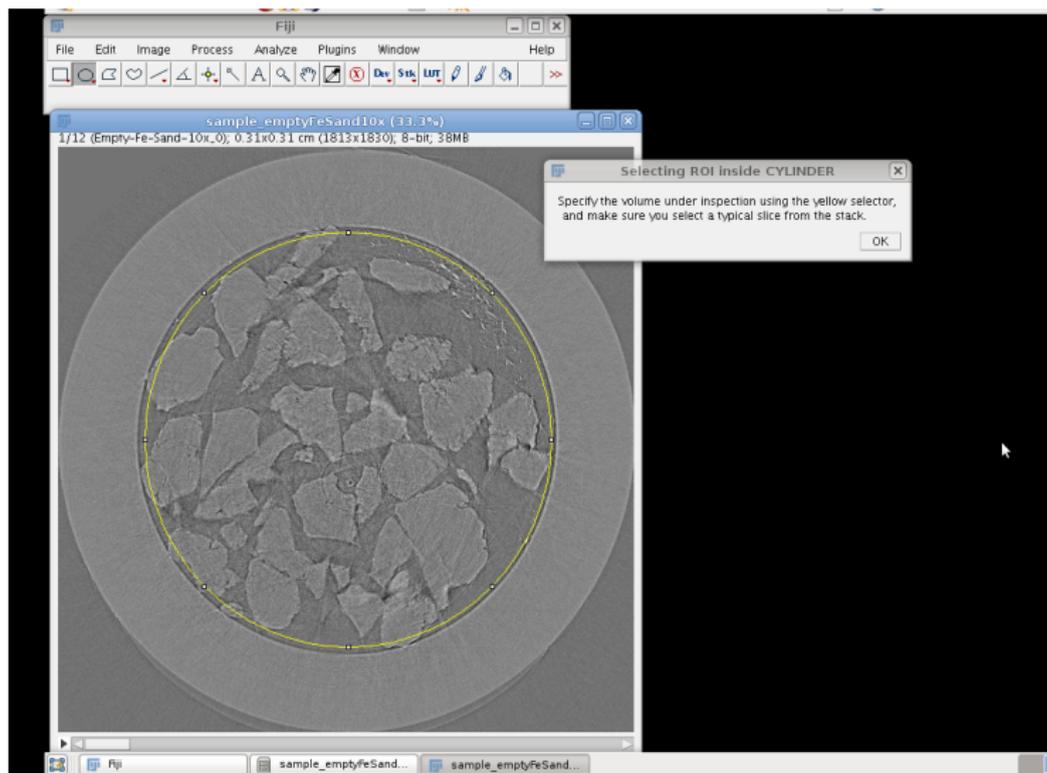


Figure: Select the ellipse inside the vessel subjected to analysis

2.2. The 2nd screen for user interaction

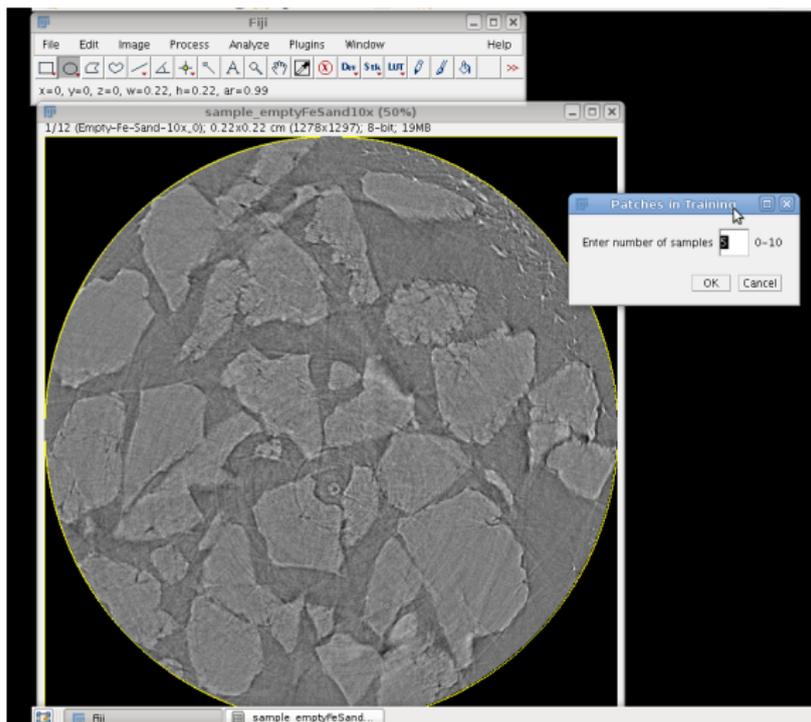


Figure: Select patches of the image containing background OR foreground - the noiser the better! Pick different slices! Avoid tiny patches!

2.3. The 3rd screen for user interaction

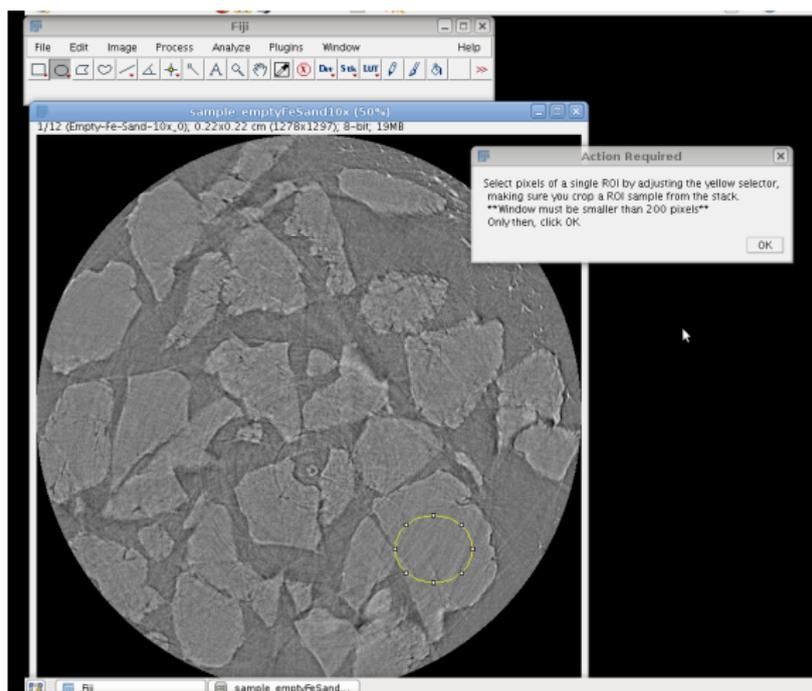


Figure: Select patches of the image containing background, then foreground - uses the same set of slices, so train with representative as opposed to expectation!

3. How much stuff does the plugin really save?

1. settings.txt
2. training patches
3. segmentation: the plugin save the result of segmentation as mask for the filtered version of the stack - to retrieve binary only, just threshold ($T > 1$) - obs: assuming the pore region never assumes $g_{i,j} = 0$

4. Repeatability: life after running the plugin

1. You can change parameters in file .txt;
2. start plugin again and enter the path to **settings.txt**;
3. click **Keep settings** (see bottom of Fig.2)

Good luck!

1. Remember: this is a prototype;
2. Your input can improve the software: contact Dani;
3. This plugin requires Fiji (NIH);
4. Examples will be available soon at:
<http://vis.lbl.gov/~daniela/software>