

ICH & PHE segmentation from non-contrast head CT v1

I) Information

Method: SinNET

Input: non-contrast head CT

Output: ICH + PHE region

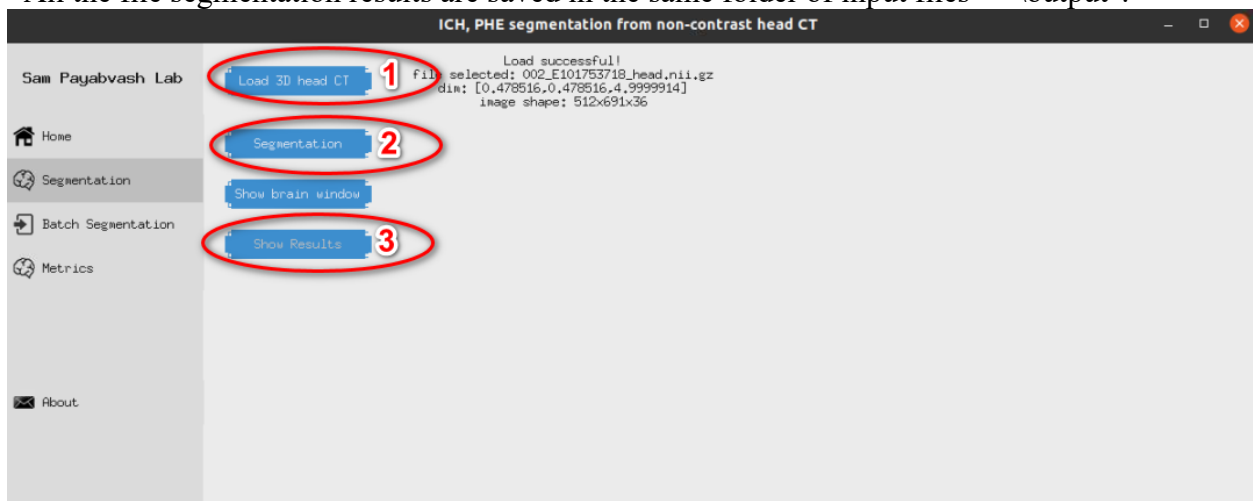
II) Run the application on Linux

1. Download the file "form*.zip"
2. Extract the file
3. Go to the folder: formV2
4. Run the command: ./formV2

III) Using the application

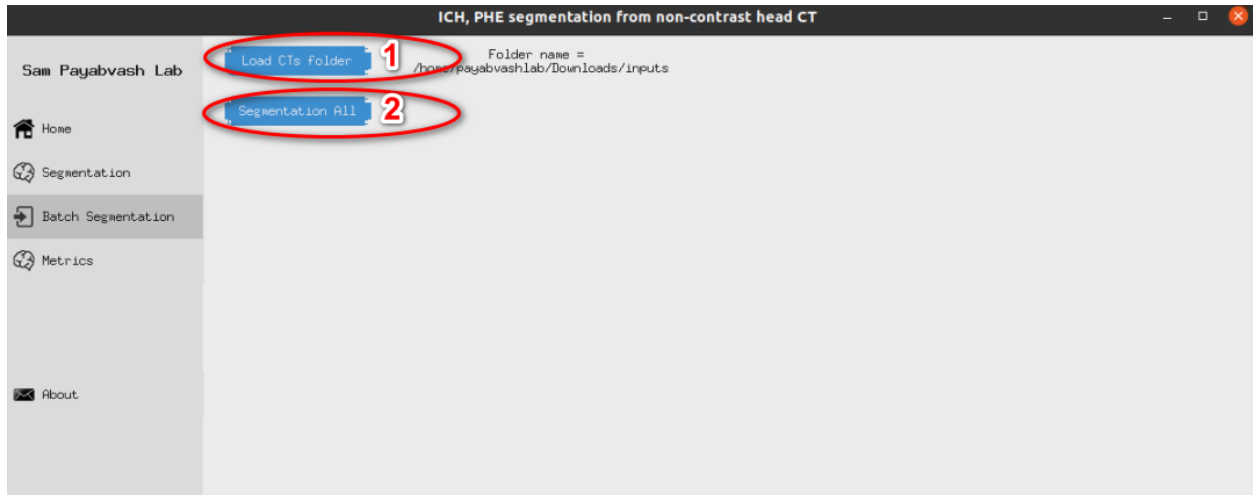
1. Segmentation

- Select "Load 3D head CT" and browse to the file. It will show the file information and we can select "Show brain window"
- Select "Segmentation". After running, it will show the status: error or successful.
- Select "Show results" to see brain+ICH+PHE
- All the file segmentation results are saved in the same folder of input files + "\output".



2. Batch segmentation

- Select "Load CT folders": browse to the folder containing *.nii.gz
- Select "Segmentation All": it will show the status of processing each patient.
- All the file segmentation results are saved in the same folder of input files + "\output".



3. Metrics

We calculated metrics: Dice, Jaccard, HD, VS, Recall, Precision, Volume masks, Volume ground-truth are included. Outputs are files report1.csv (label 1 PHE) and report2.csv (label 2 ICH) in the output folder

Please follow 5 steps:

- Select CT folder for groundtruth
- Input pattern to extract the name of patient
- Select CT folder for mask
- Input pattern to extract the same name with groundtruth
- Select Metrics button.

For example:

In ground-truth folder: filename = E123456789_seg_ICH.nii.gz

Pattern to split = _seg_ICH.nii.gz

In mask folder: filename = E123456789_head_predictionICH.nii.gz

Pattern to split = head_predictionICH.nii.gz

