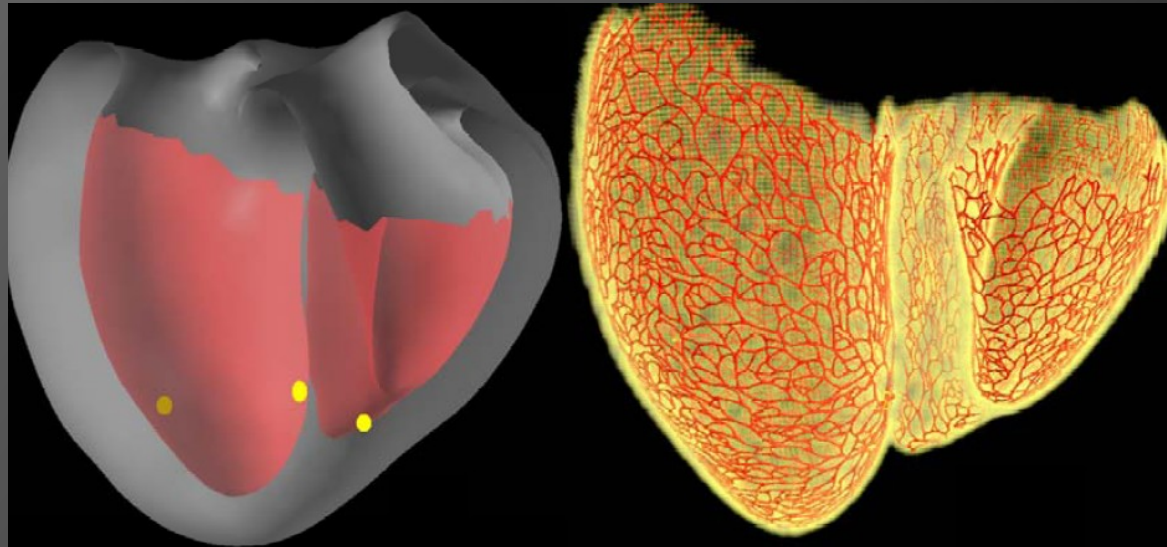


Purkinje network modeler

Short manual



This is a research prototype. Do not re-distribute.
It may have bugs and problems, but we do not provide any support.
Sorry, there currently is not detailed manual.

Environment

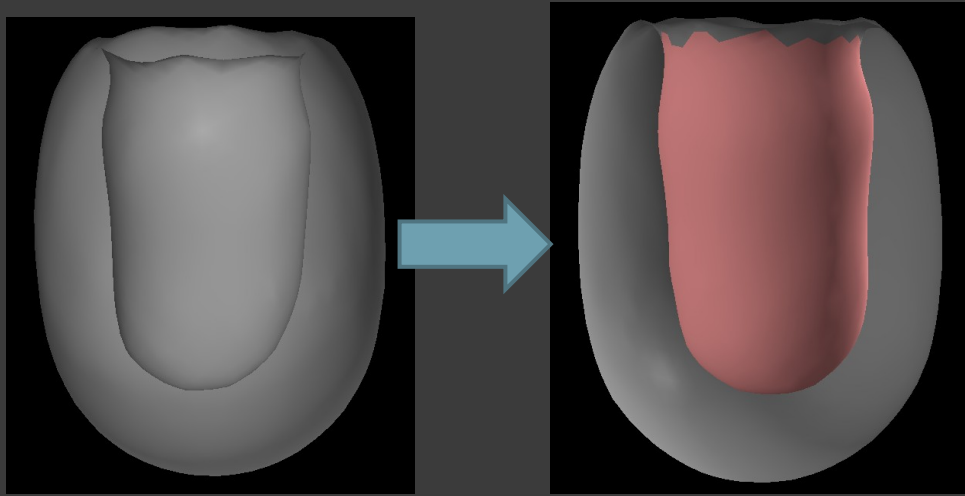
- ⦿ Windows 7 (maybe) / Windows Vista / Windows XP (maybe)
- ⦿ Requires “Visual Studio 2008 Runtime”
 - <http://www.microsoft.com/downloads/details.aspx?displaylang=en&FamilyID=9b2da534-3e03-4391-8a4d-074b9f2bc1bf>

Input and output file format

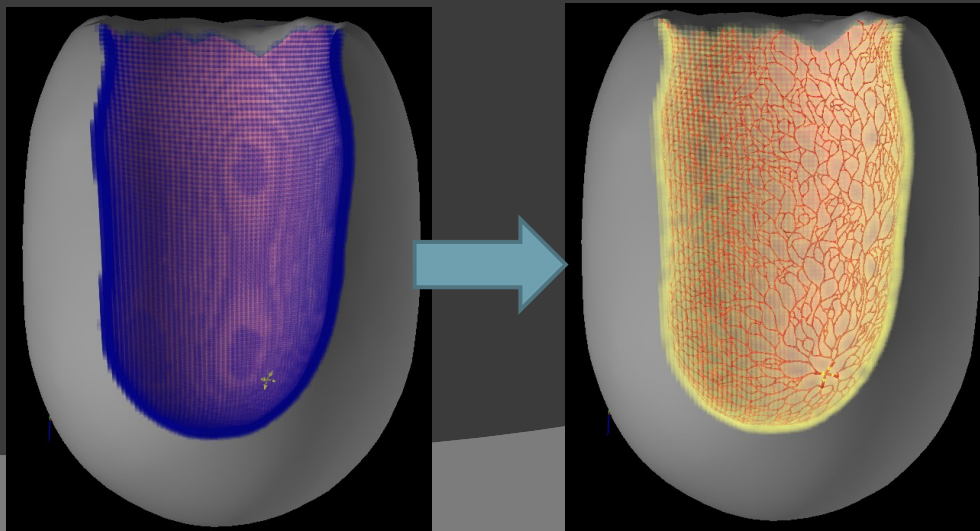
- ⦿ Input : surface mesh (wavefront (.obj))
- ⦿ Output : Purkinje network data (wavefront (.obj))

Generation step

① 1, Segmentation



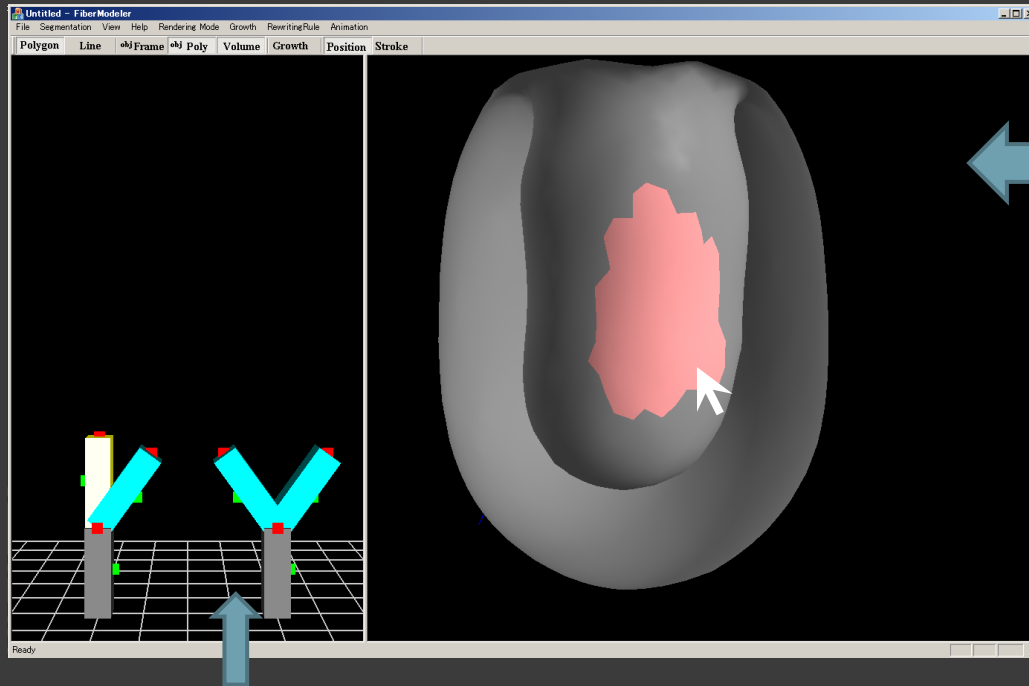
② 2, Network work generation



1, Segmentation

- ⦿ The user has to specify ventricle wall regions of heart model
- ⦿ Steps
 - boot the software (prukinjeModeler.exe)
 - Specify heart surface model (.obj)
 - Please use ./sampleModel/sampleobjk.obj for a trial
 - Ignore the next file dialog
 - click “Menu>Segmentation>SegmentationMode”
 - Paint target surface (see next page)
 - Click “Menu>Segmentation>Export Current Segmentation” to save **.fbseg file

Segmentation interface



Left window is useless

Left drag : specify foreground

Right drag : rotate the camera

Middle drag : Zoom

Right or Middle double click :
erase foreground region

2, Fiber generation

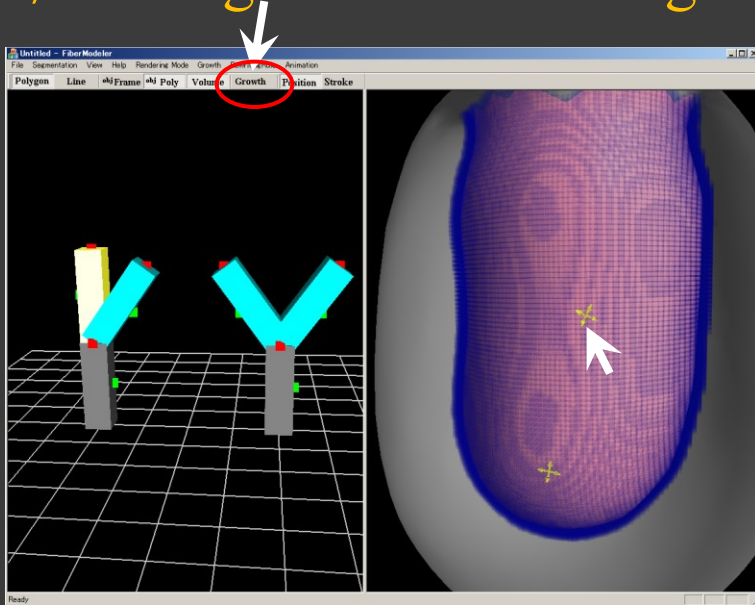
- ⦿ The user can construct fiber network

- ⦿ Steps

- Re-boot the software (prukinjeModeler.exe)
- Specify heart surface model (.obj)
 - Please use ./sampleModel/sampleobjk.obj for a trial
- Specify segmentation data (.fbseg)
 - Please use ./sampleModel/segmentation.fbseg for a trial
- Generate Fiber network (see next page)
- Click “Menu>File >Export Current fibers(.obj) ” to save **.obj file

Fiber network generation

2, Click growth button to grow network



1, Left drag : specify init point

Right drag : rotate the camera

Middle drag : Zoom

Useless currently

