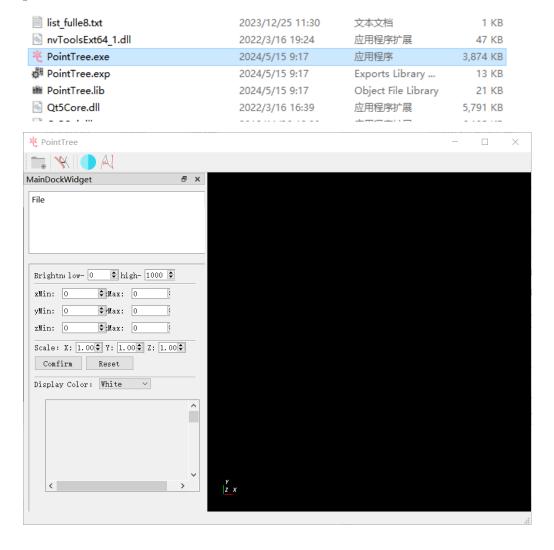
# The user guideline

## 1. Summary

PointTree software can reconstruct long-range projections of neurons. For any feedback on this software, please contact the authors: Tingwei Quan, quantingwei@mail.hust.edu.cn; Lin Cai, cailin0227@mail.hust.edu.cn.

#### 2. Install

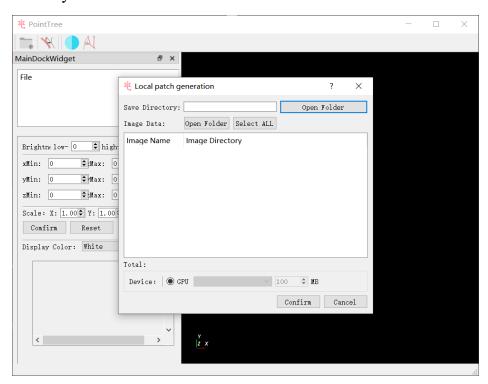
PointTree currently only supports Windows; after unpacking the zipped package, please double-click PointTree.exe to start the software.



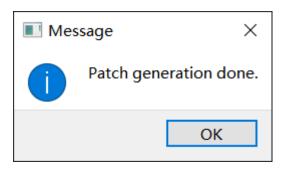
# 3. Quick Start

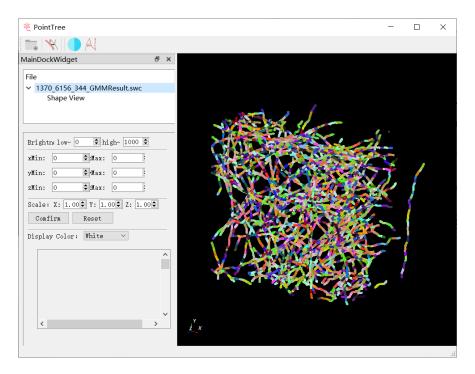
#### 3.1 Local patch generation.

Step 1. Click to enter the Local patch generation model. Click "Open Folder" to select save directory and input data. Click the button "GPU" to show all available GPU devices. Choose appropriate gpu device and set usable gpu memory size.



Step 2. After click 'Confirm', local patch generation will start. While the process is done, a message box will appear. The results can be dragged into the software and be visualized by right click.

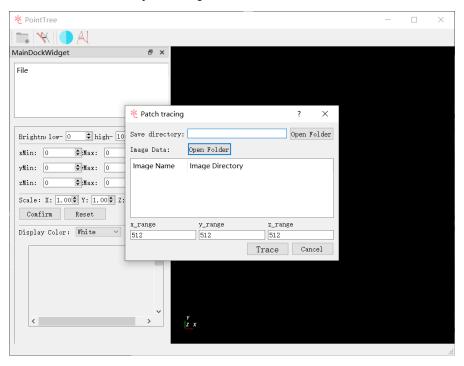




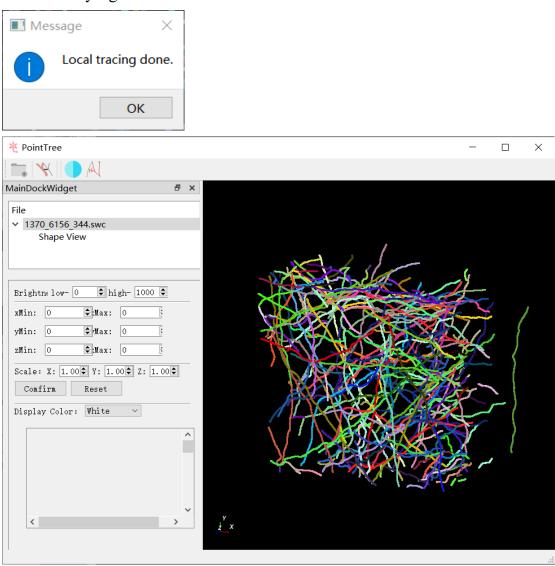
Note: Local patch generation model needs GPU device supporting cuda11.1 and latest driver for the GPU device.

## 3.2 Patch tracing.

Step 1. Click to enter the Patch tracing model. Click "Open Folder" to select save directory and input data.

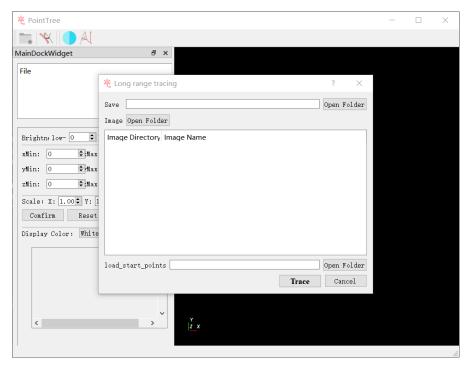


Step 2. After click "Trace", Local trace will start. While the process is done, a message box will appear. The results can be dragged into the software and be visualized by right click.

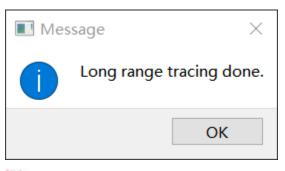


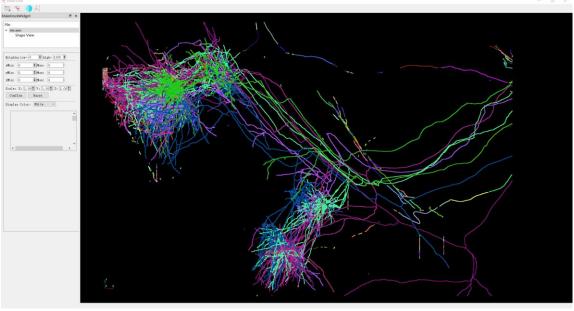
# 3.3 Long range tracing.

Step 1. Click to enter the Long range tracing model. Click "Open Folder" to select save directory, input data and the start points where the long-range projections start.



Step 2. After click "Trace", Long range tracing will start. While the process is done, a message box will appear. The results can be dragged into the software and be visualized by right click.





Note: Also choose TXT to select file to add image data. The TXT file only need to contain data which cover the reconstruction range.

