

Ink/Stitch

Working with an Existing Image - File Preparation

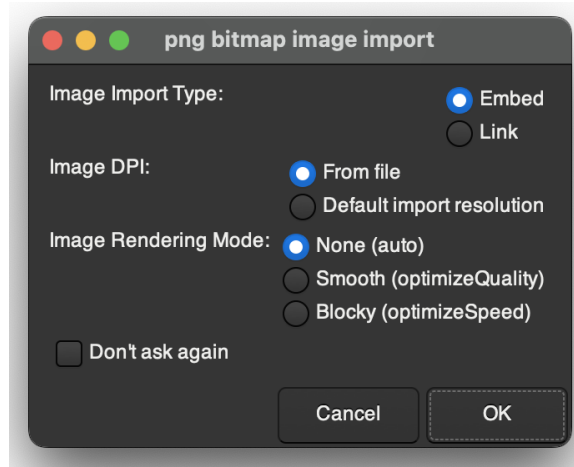
We're going to be working with the Ability Project logo, breaking it up and extracting the torch part to make a pin.

You can download it [here](#).

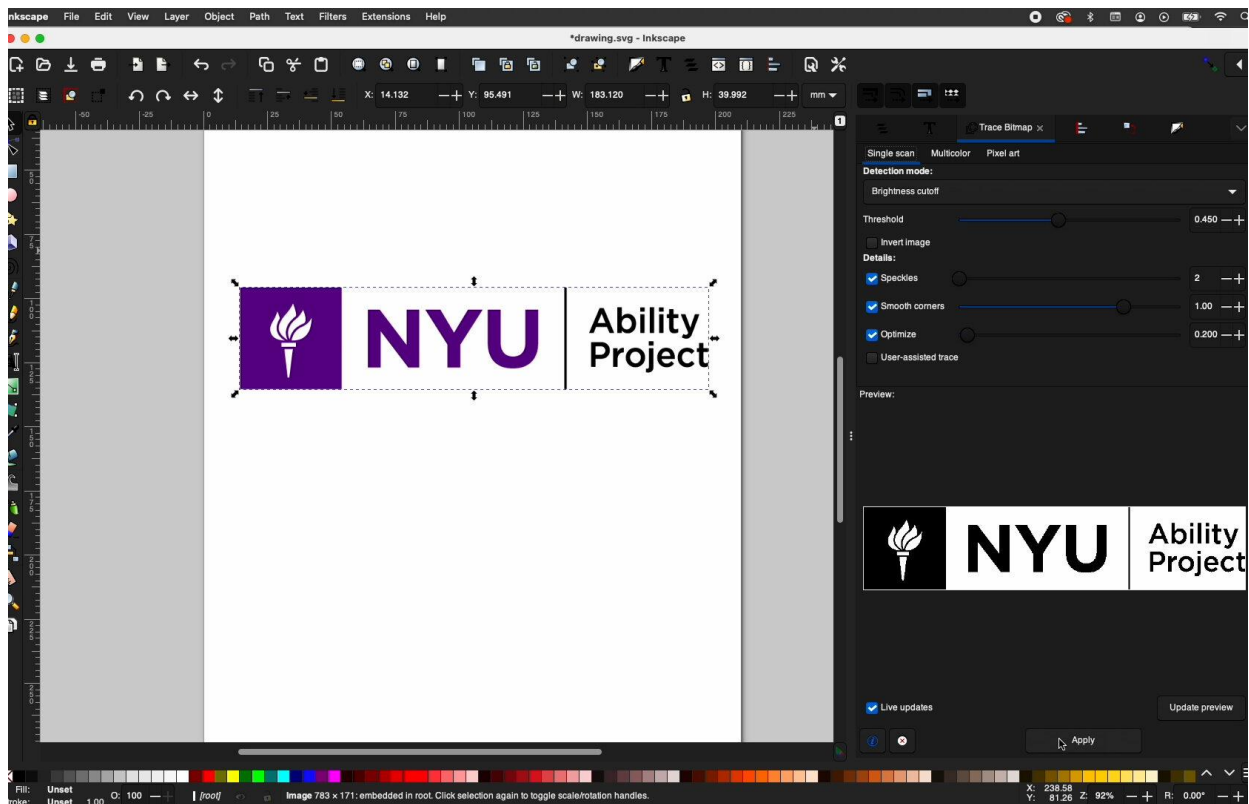
We'll convert this .png file in Inkscape to a vector image using the bitmap trace function.



- Open Inkscape
- Set up your document to match the hoop size you'll be using
 - File > Document Properties
 - We'll be using the small square hoop, 120 mm x 120 mm
 - Close the dialog box. The measurements will automatically update. You can save this as a template as well. (File > Save Template)
- Import the image
 - File > Import > Ability Project Logo.png
 - Image Import Type > Embed
 - Image DPI > From File
 - Image Rendering Mode > None (auto)
 - Click OK!



- Keep the original on its own layer and make a duplicate to work with on another layer.
 - Layer > Duplicate current layer
- Hide the original by clicking on the eye to the right of the original in the layers panel
- Select the image in the layer
 - Path > Trace Bitmap
 - Try the Brightness cutoff first.
 - Click Apply



- In the layers panel, there will now be a path added to the layer. Delete the image copy.

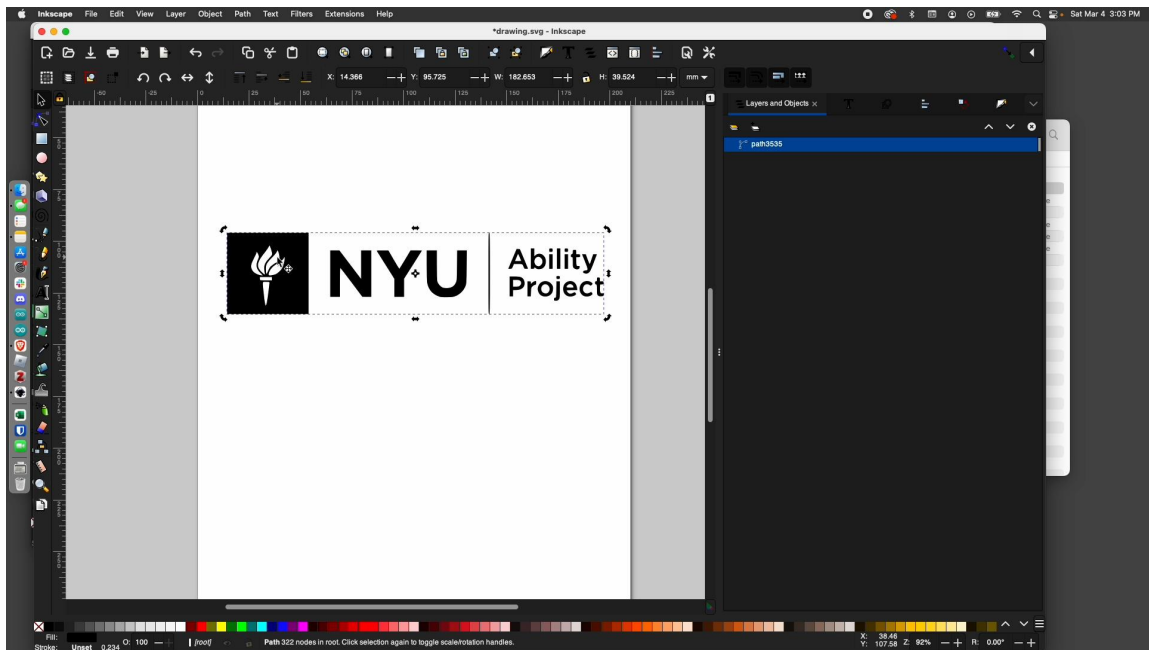


NYU

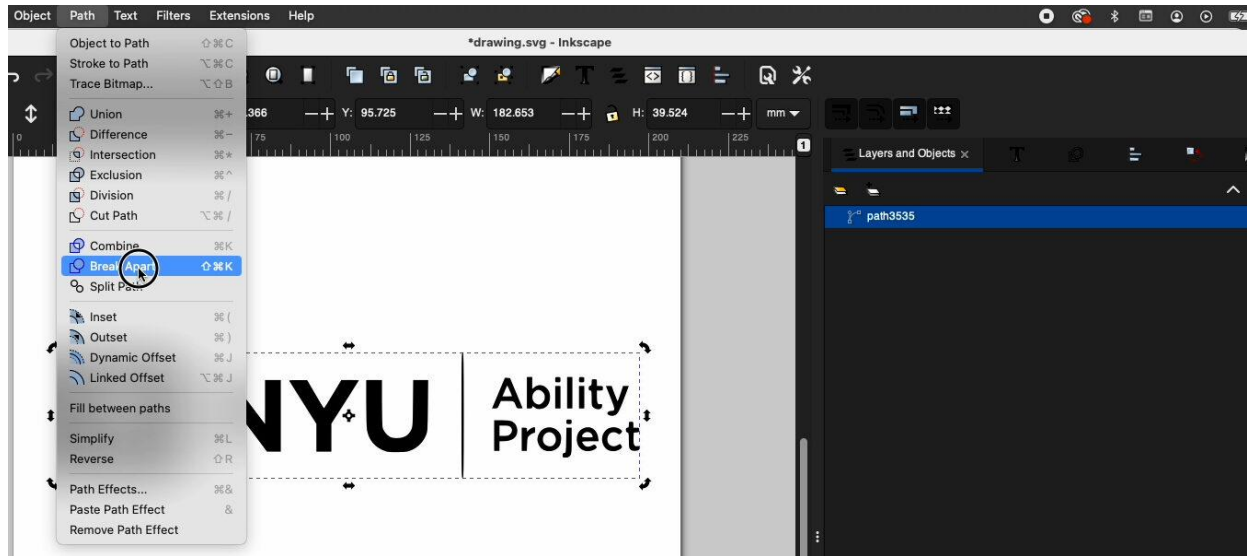
Ability
Project

Traced Bitmap result

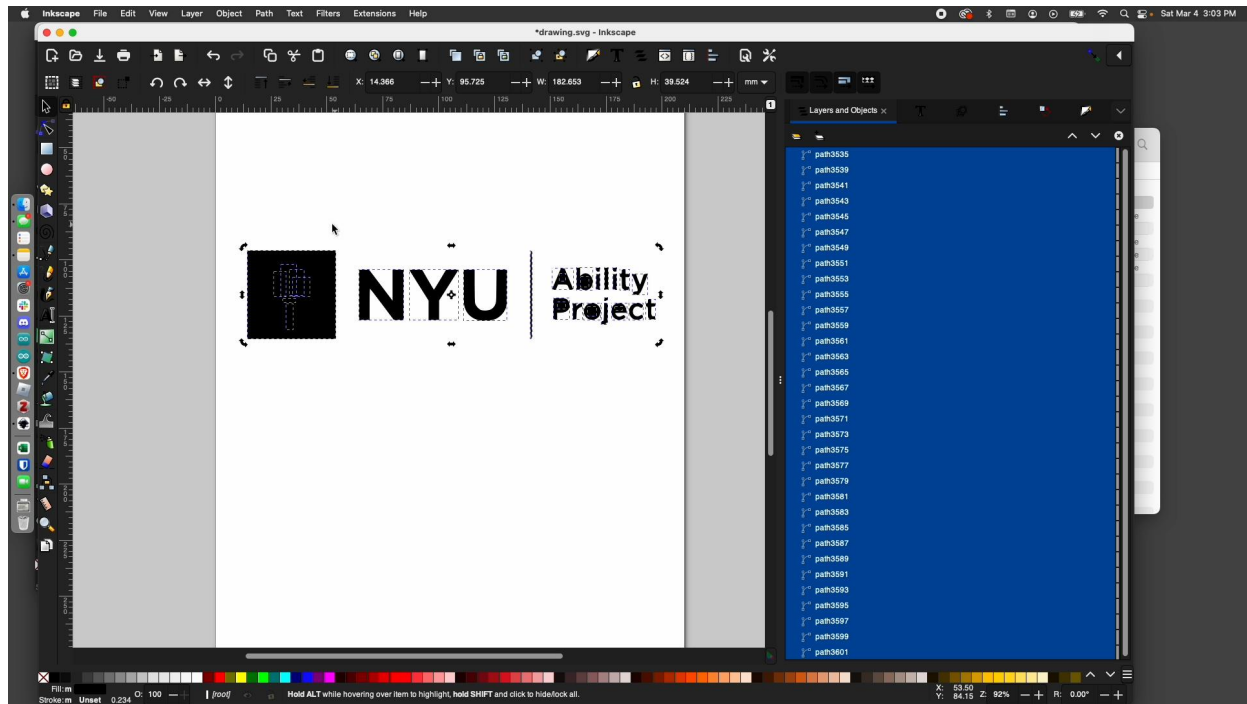
- Once you've deleted the original image, you'll be left with a Black and White version, and there'll be only one path in the layers panel



- Select Path > Break Apart to separate the elements

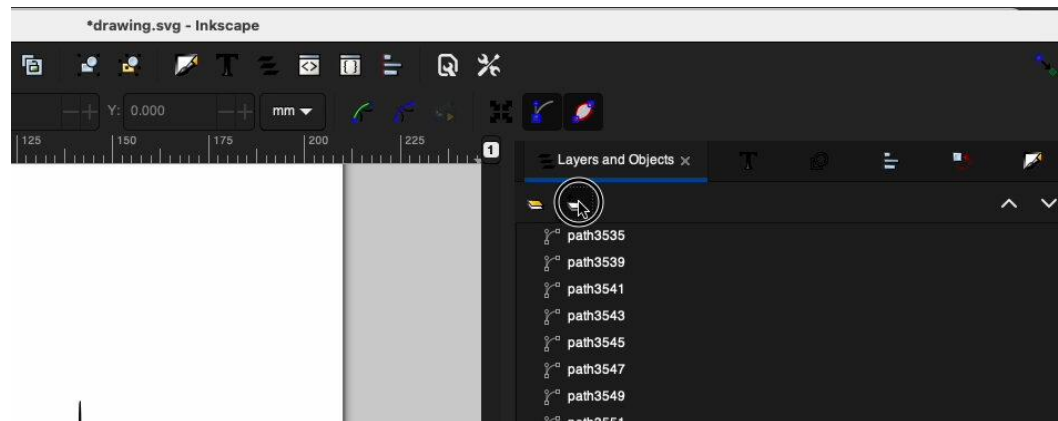


[caption id="attachment_47" align="aligncenter" width="912"]

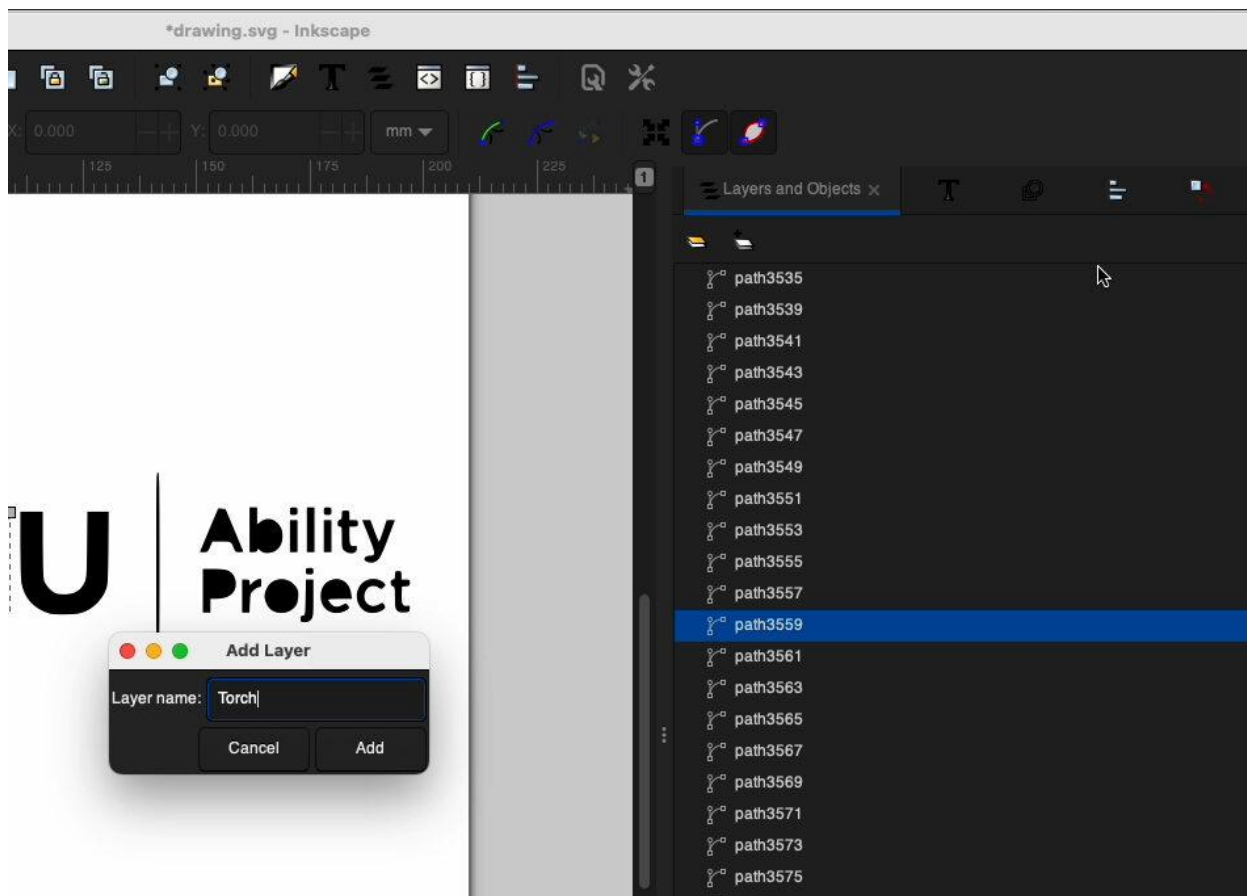


- Make a new layer

- Click the "New Layer" Icon

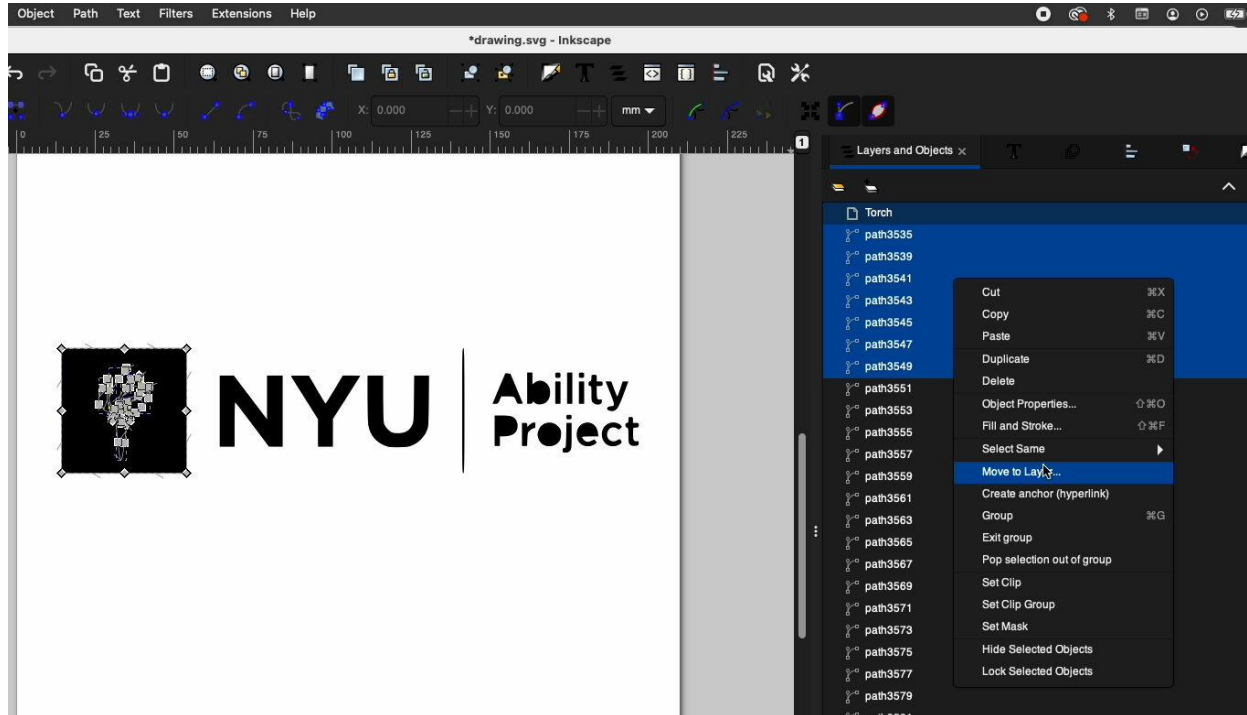


- Name the layer "Torch" & Click Add



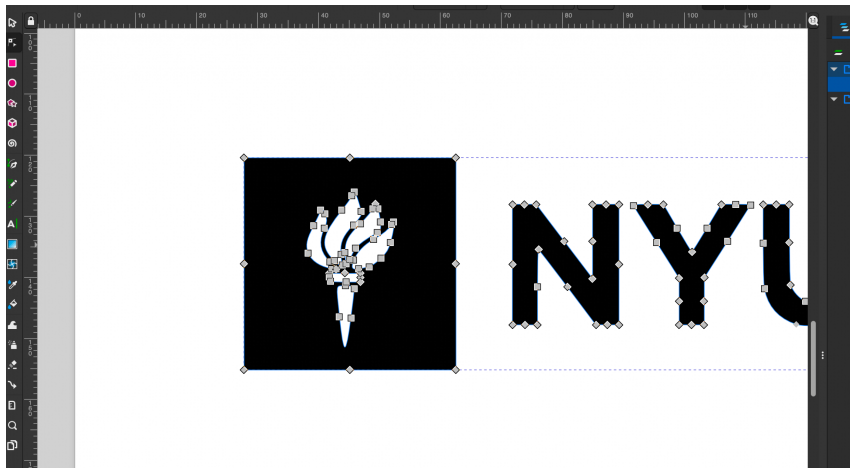
- Using the Selector Tool (S), drag a marquee around the black square that contains the torch.
- Layer > Move Selection to Layer

- Choose the Torch Layer



- The Torch

- Select the "Edit Paths by Nodes" tool (N) and click on the torch area of the logo. You'll see the grey nodes appear.

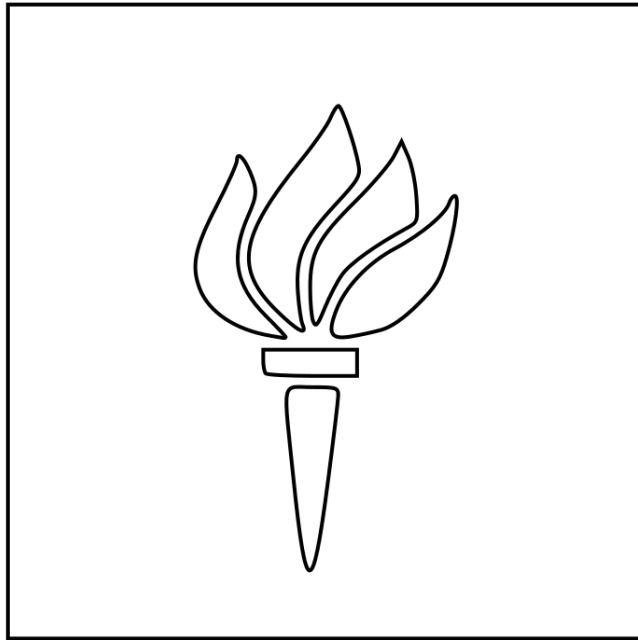


If you look at the bottom left corner of the screen you'll see the Fill and Stroke boxes.



You can click on one of the color boxes to quickly change the Fill, and Shift+Click on a color to change the Stroke. Click or Shift-Click on the box with the red X to remove Fill or Stroke. Let's remove the fill and use only a stroke for the torch. Click on the X box to remove the fill and Shift+Click on a color to choose the stroke.

- Outline stroke width: 0.5mm
- Torch stroke width: 0.3mm



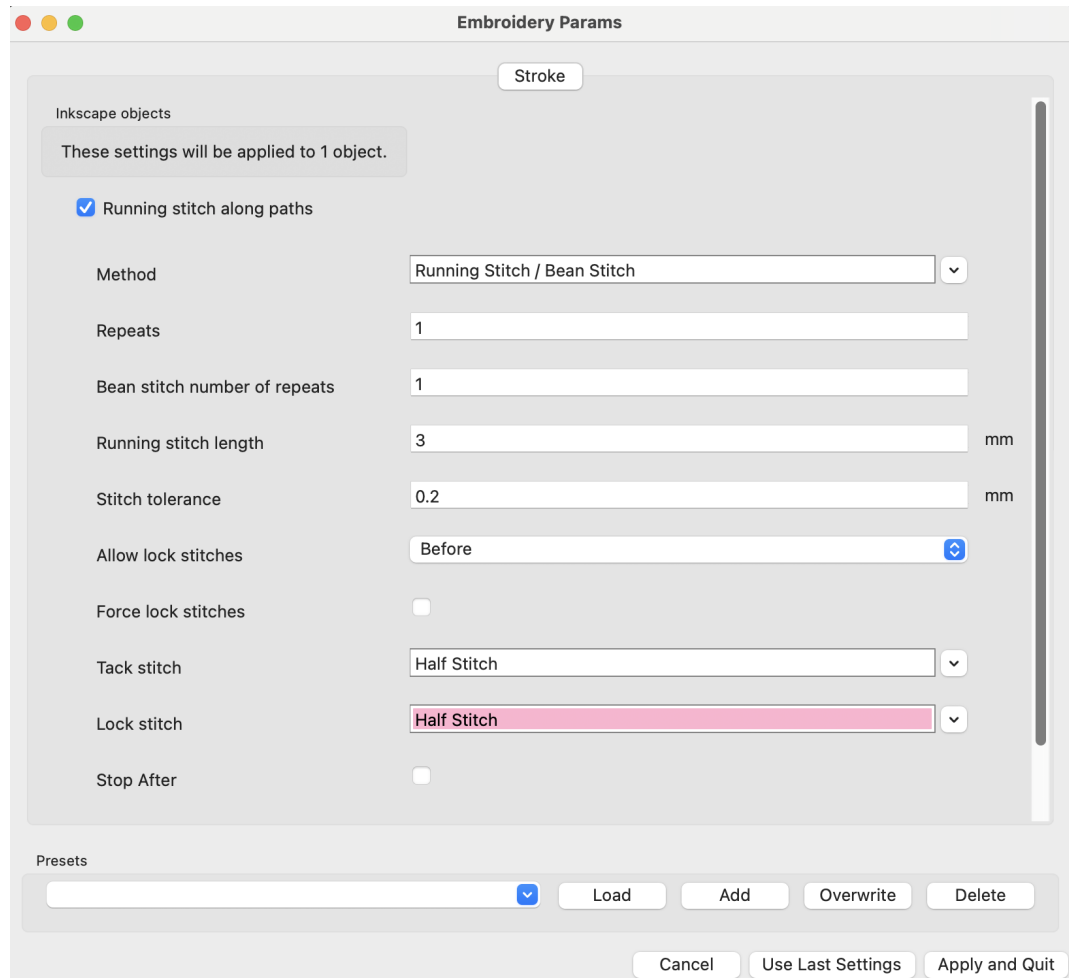
- Select and scale torch to 110% (Transform > scale proportionally 110% > Apply)
- Select the whole layer & use Selector Tool (S) to Control+click-drag to 47.5mm x 47.5mm

Parametrize the Image (i.e. get it ready for embroidery)

Create a Single Bean Stitch for the Square Outline

Select the Square Outline

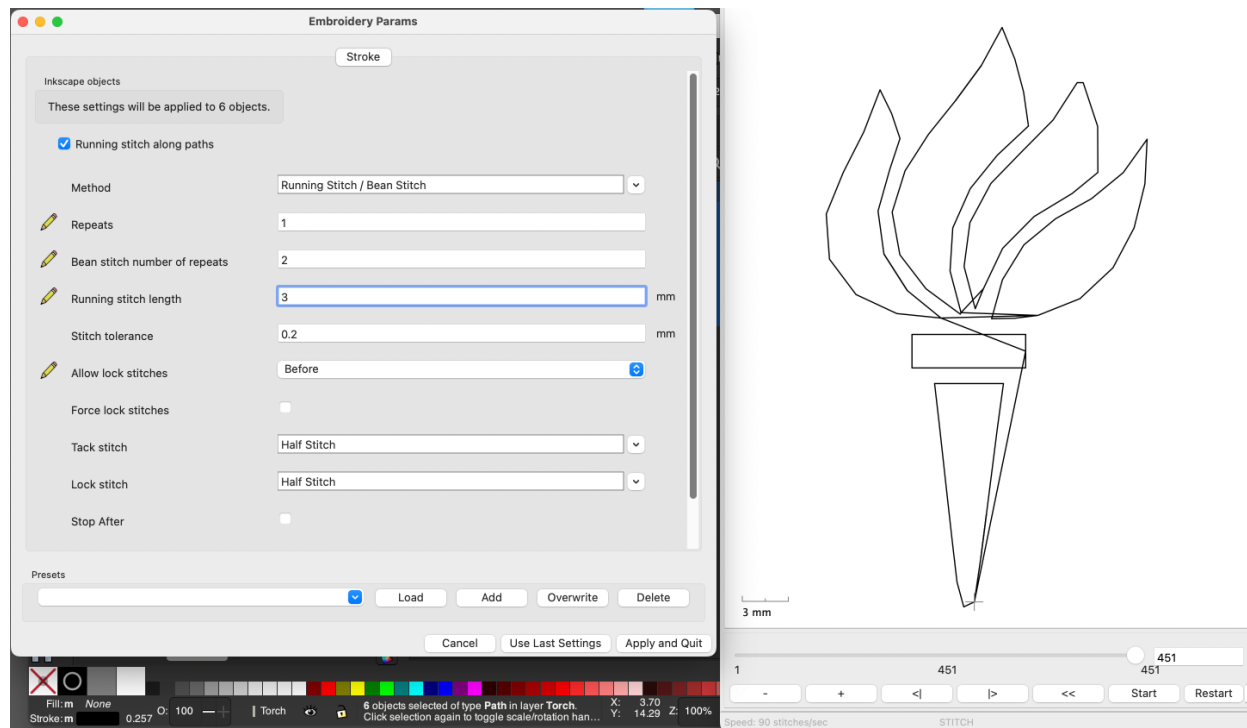
- Now go to the Params Menu
 - Extensions > Ink/Stitch > Params
 - Enter the numbers as shown below
 - Repeats > 1
 - Bean Stitch number of repeats > 1
 - Running Stitch Length > 3 mm
 - Stitch Tolerance > 0.2
 - Allow lock stitches > Before
 - Apply & Quit



Create a Double Bean Stitch for the Torch

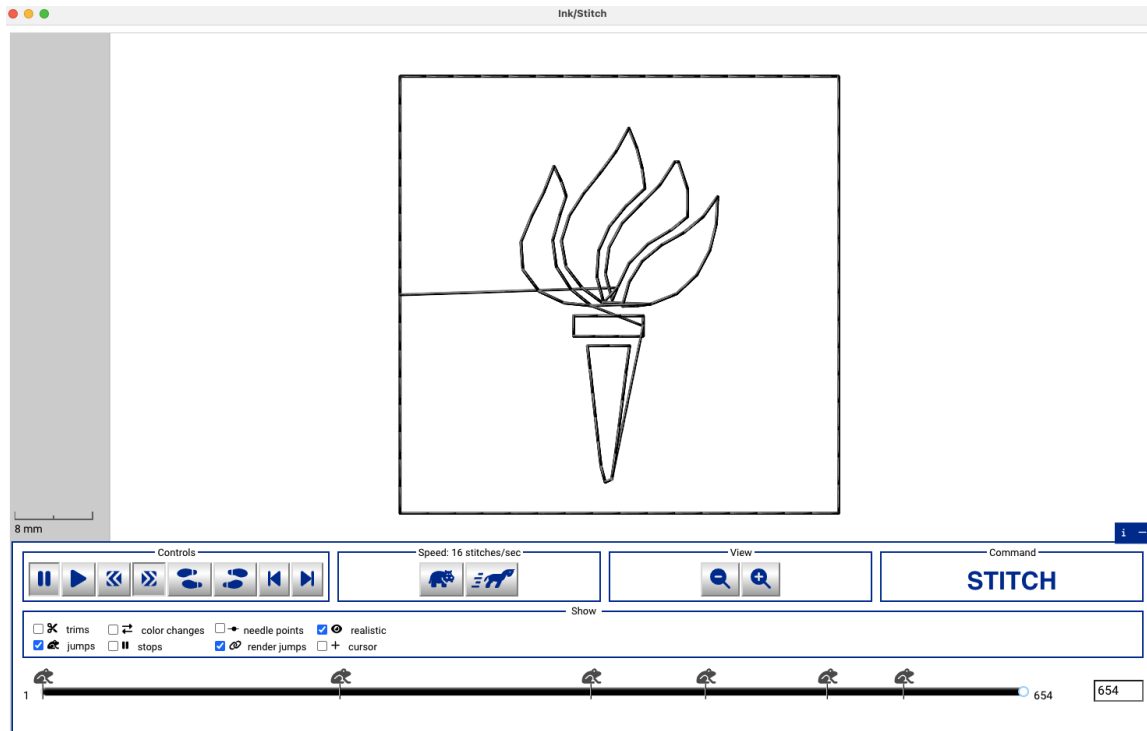
Select all of the Torch Paths in the layers tab

- Now go to the Params Menu
 - Extensions > Ink/Stitch > Params
 - Enter the numbers as shown below
 - Repeats > 1
 - Bean Stitch number of repeats > 2
 - Running Stitch Length > 3 mm
 - Stitch Tolerance > 0.2
 - Allow lock stitches > Before
 - Apply & Quit



Visualize & Check Jump Stitches

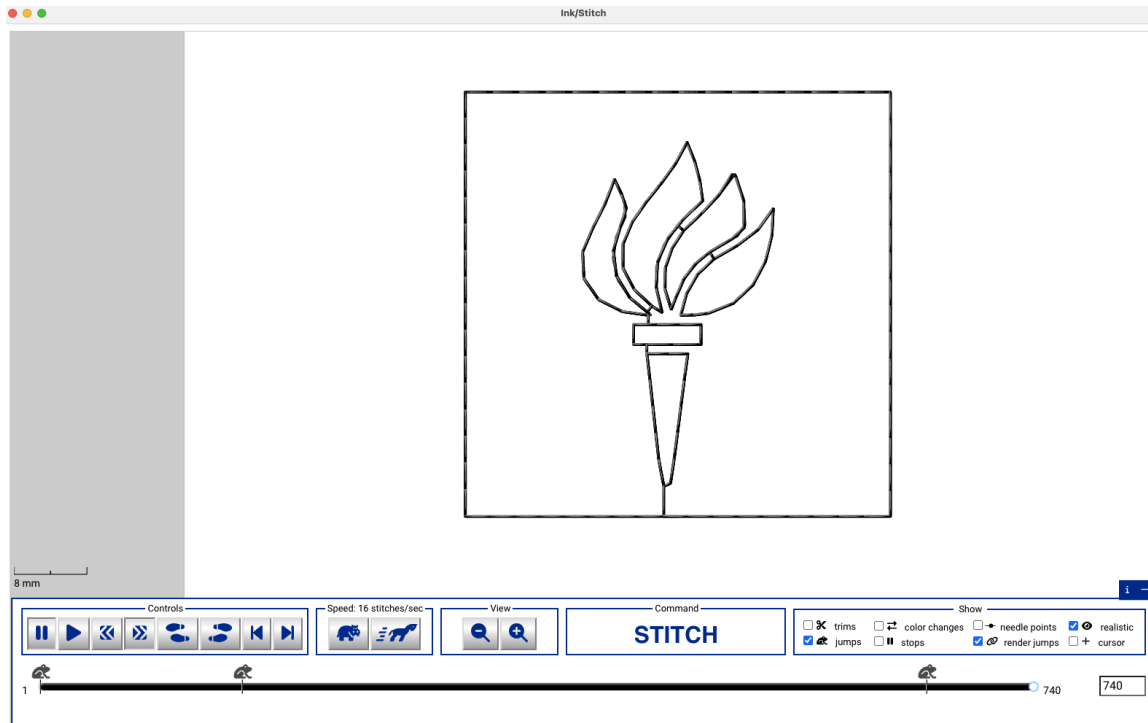
- Extensions > Ink/Stitch > Visualize and Export > Simulator / Realistic Preview



Ink/Stitch can make your stitching more efficient. Exit the GUI, select your stitch layer and open up the Autoroute option. **Extensions > Ink/Stitch > Tools: Stroke > Autoroute Running Stitches**

**** it's a good idea to save your file as a copy before you Autoroute****

- Keep "Add nodes at intersections" checked
- Apply
- There will be a new folder called "AutoRoute"

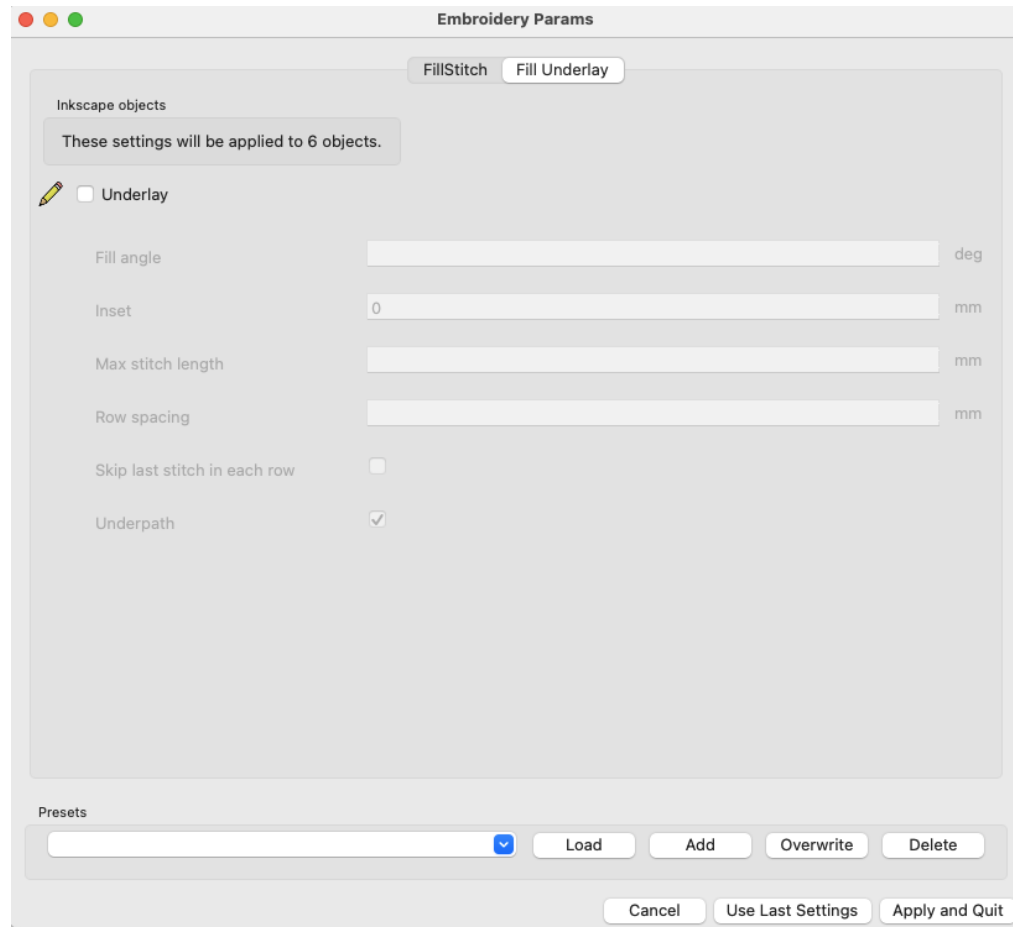


Save your file for embroidery

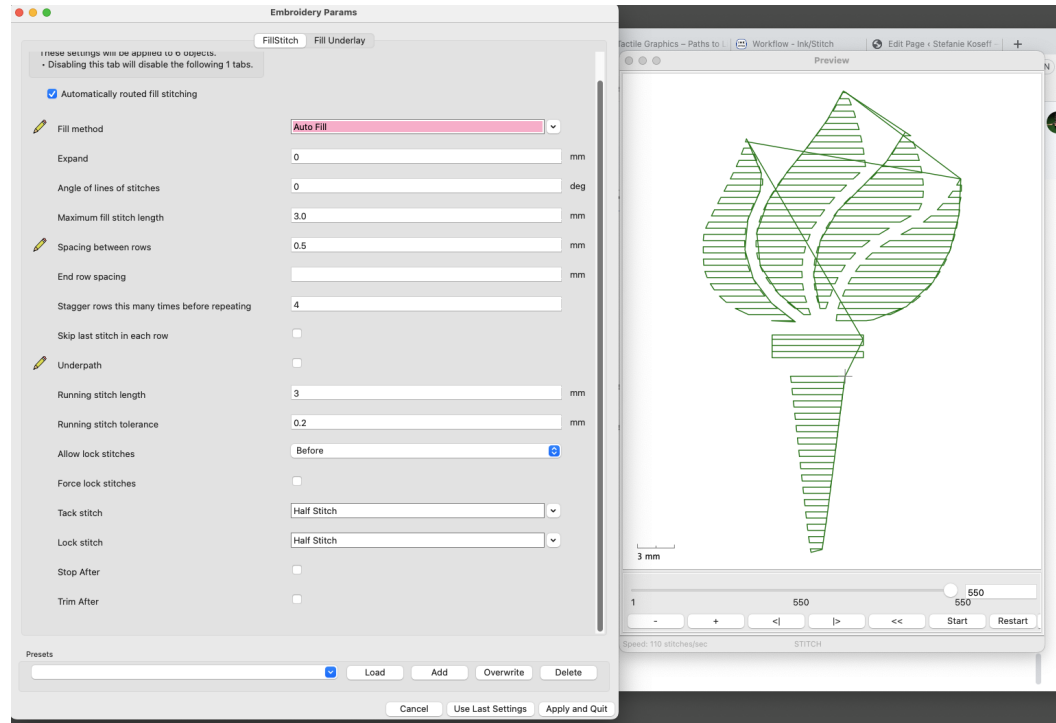
The Pfaff Creative 1.5 uses (.vp3) files. Use “Save a Copy”.

All Sorts of Fills!

- Select the torch elements and click on any color to fill the shapes
 - We’ll use a setting we found to be useful, but feel free to experiment on your own!
- Let’s erase the stroke (shift click X to remove)
 - Depending on the design and the size of the shape, sometimes keeping the stroke and the fill makes the stitching too dense and tactilely messy
- With the shapes selected in the layers panel, Open the Params menu. This will set parameters for only the torch elements (not the square)
 - Extensions > Ink/Stitch > Params
 - Uncheck Underpath and Underlay in the Fill Underlay Tab



- In the Fill Stitch tab, change the following params:
 - Spacing between rows 0.5mm
 - Uncheck Underpath
 - Running Stitch Length 3.0mm



- Click Apply and Quit
- Make a copy of your file
- Select the entire torch layer and AutoRoute the stitches
 - Extensions > Ink/Stitch > Tools: Stroke > Autoroute Running Stitches
- Preview your work!
 - Extensions > Ink/Stitch > Visualize and Export > Simulator / Realistic Preview
- Save a copy as (.vp3) and prepare to stitch!
 - These are params for creating the evaluated fill patterns we used for our tactile interpretations of historical textiles.
 - [InkStitch Pattern Params.pdf](#)
 - Also, there are many more snazzy fill patterns available! Select “Fill Method” in FillStitch params.