DIGITAL PATTERN MAKING

~mini tutorial~

The following pages are an excerpt from my Yanfei cosplay guide (in particular the red top lapels/gold vinyl details), and contain a mini tutorial on how I create digital patterns. This is the same method I use for pretty much all my patterns, so you can follow along and apply this to any of your own patterns you wish to digitise. There are probably much easier and efficient ways to do this, however this is what I find works best for me right now!
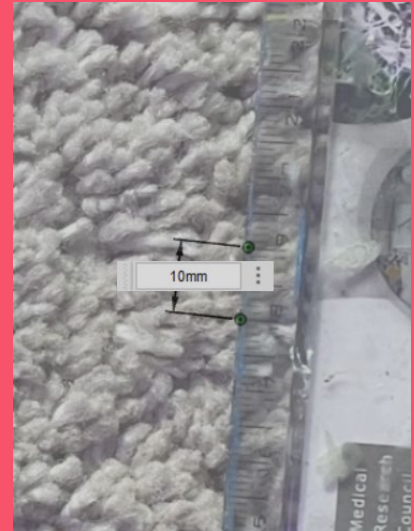
I've included links to all of the programs/website etc that I've mentioned below:

- Fusion360: https://www.autodesk.co.uk/products/fusion-360/overview
- Shaper plug-in tool: https://apps.autodesk.com/FUSION/en/Detail/Index?id=366266523586169729&appLang=en&os=Mac
- Cricut Design Space: https://design.cricut.com/
- GIMP: https://www.gimp.org/
- Contrado: https://www.contrado.co.uk/
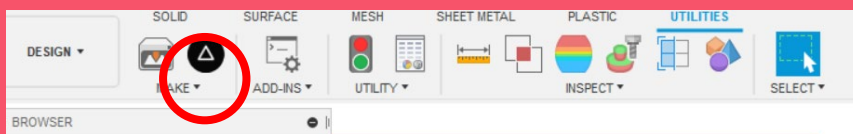- Spoonflower: https://www.spoonflower.com/

[HOW TO MAKE DIGITAL PATTERNS]
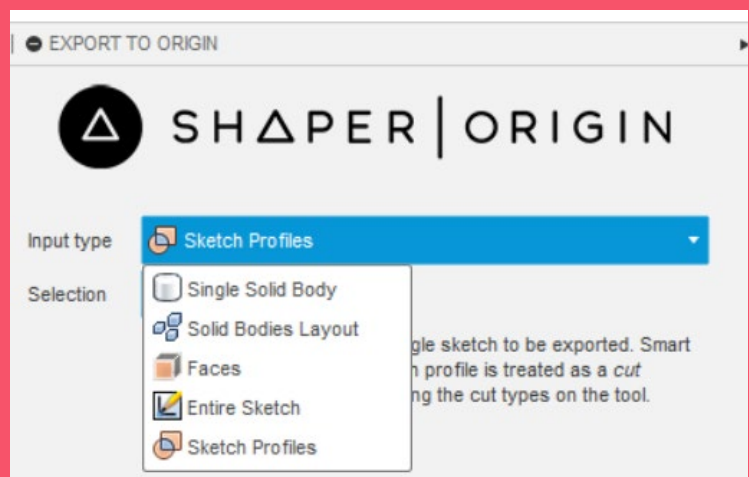
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Once I've finalised my paper pattern, I make a digital version. I do this by taking a photo of the paper pattern next to a ruler then importing the image into Fusion360. I then calibrate it to the correct scale by using Fusion360's Calibrate tool and matching it up to the ruler.
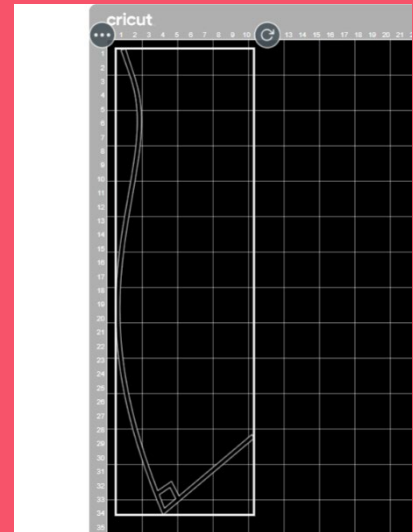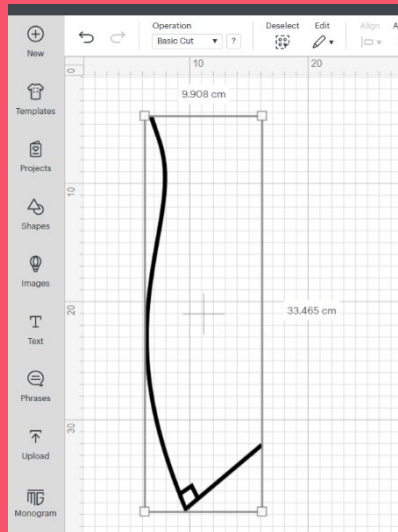

I create a sketch for the pattern piece outline, as well as the gold details. From here, you can export these sketch profiles as SVG files using the Shaper plug-in. SVGs are essentially flat outline images that can be scaled without losing image quality, and these are used in cutting out vinyl shapes with a Cricut.
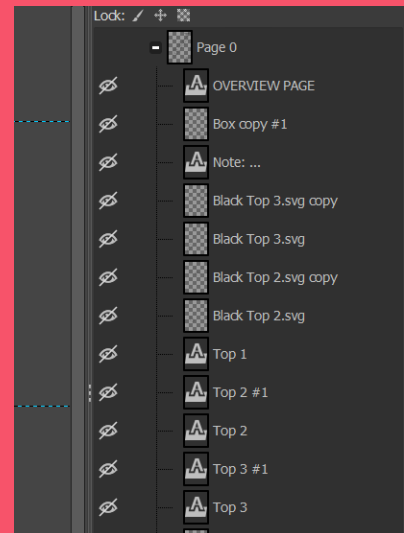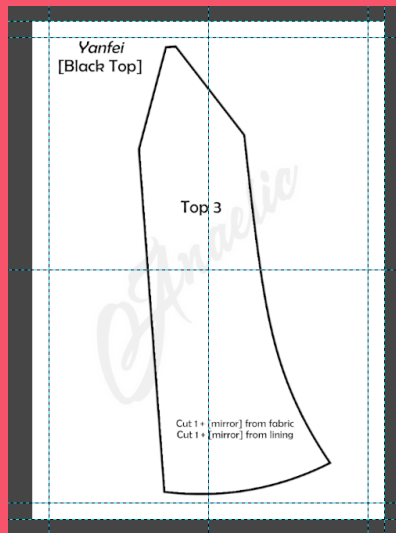

You have a few options for exporting with Shaper. I tend to go for "sketch profiles", but sometimes this can be extrude the sketches as 3D bodies first, then export those bodies which will appear as flat 2D SVG images.

For SVGs I want to cut out with my Cricut, I import these to the Cricut program. Most of the time Cricut will open them as the same size you made them in Fusion360, however sometimes it opens them at the incorrect size. If this is the case, then double check the correct size in Fusion360 then adjust this in Cricut.

For pattern pieces that I want to turn into digital PDFs, I import then SVGs to a software called GIMP, which is essentially a free version of Photoshop. Scaling these can be tricky, but if you open them up in an A4 sized canvas then you can compare them to the correct scale in Fusion360.

This same method can also be applied to making HD files for custom fabric printing. I create the pattern outlines in the same way in Fusion360, then once I've imported them to GIMP I can use the gradient/airbrush tools to add colour.

Example: Boss Raiden Shogun

Here, I added all individual pieces at the correct scale onto a single rectangular image, so I could get this printed on one rectangular piece of fabric at the correct scale. For custom fabric printing, I use the website Contrado. Spoonflower is also another option for USA-based customers.