

3 Raster to Vector

Now you will start your journey into the digital world. The goal of this assignment is to convert your hand-drawn masterpiece into line work the computer can read. If you're new, you may be wondering what the terms raster or vector means. Well, a raster is an image that is made up of individual pixels. The amount of pixels contribute to the overall quality of an image. As for vectors,

these are made up of points, lines, and curves that are based on mathematical formulas. This results in the ability to scale vector graphics and not lose fidelity as you would with a raster. Using vector-based softwares opens up your art to new mediums and scales, so trace away!

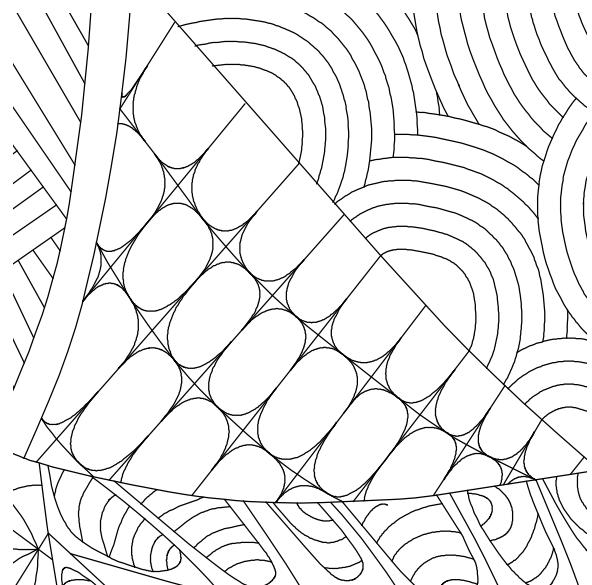
Final Deliverable:
One .SVG file of the vectors from your drawing

Instructions

1. After you scan in your hand-drawn 3.5" x 3.5" square by following the instructions in Assignment 2, you should have a raster image. Import this image into any vector graphics program of your choosing. We recommend using Illustrator or Inkscape to proceed.
2. In the vector program of your choice, create a document that is 8.5" x 11" oriented horizontally. Import your scanned raster image and scale it to 6.5" x 6.5".
3. Now, simply trace your hand drawn line work using any of the vector tools that are offered within the software you chose. **Note: Please avoid any type of fill pattern/coloring.**
4. If you don't have any experience with any of the programs that perform these functions, please refer to the tutorials we have provided on the next page of this document.
5. Keep in mind that in the next step you will be plotting this linework using the Axidraw. Be sure to create separate layers for linework that you may want plotted in a different color or with a different pen thickness.
6. Once you are finished tracing your line work, export the file as an SVG file type so it can be imported into Inkscape to run the Axidraw.
7. Proceed to M1A4



Raster Image Scaled



Vector Linework Scaled

Downloads

Inkscape: <https://inkscape.org/release/inkscape-1.2/>

Illustrator: https://www.adobe.com/products/illustrator/campaign/pricing.html?sdid=KKQML&mv=search&ef_id=CjwKCAjwzeqVBhAoEiwAOrEmzTvMs1A6o6UYp_UqL-QpqDKUGuc3ltyifDfnickbvTxDJepXeq4RxoClzcQAvD_BwE:G:s&s_

Illustrator for Ball State Students: <https://www.bsu.edu/about/administrativeoffices/information-technology/services/digital-tools/adobe-creative-cloud>

Axidraw Software Installation for Inkscape
https://wiki.evilmadscientist.com/Axidraw_Software_Installation

Tutorials

Inkscape: <https://inkscape.org/learn/tutorials/>

Illustrator: <https://helpx.adobe.com/illustrator/tutorials.html>