

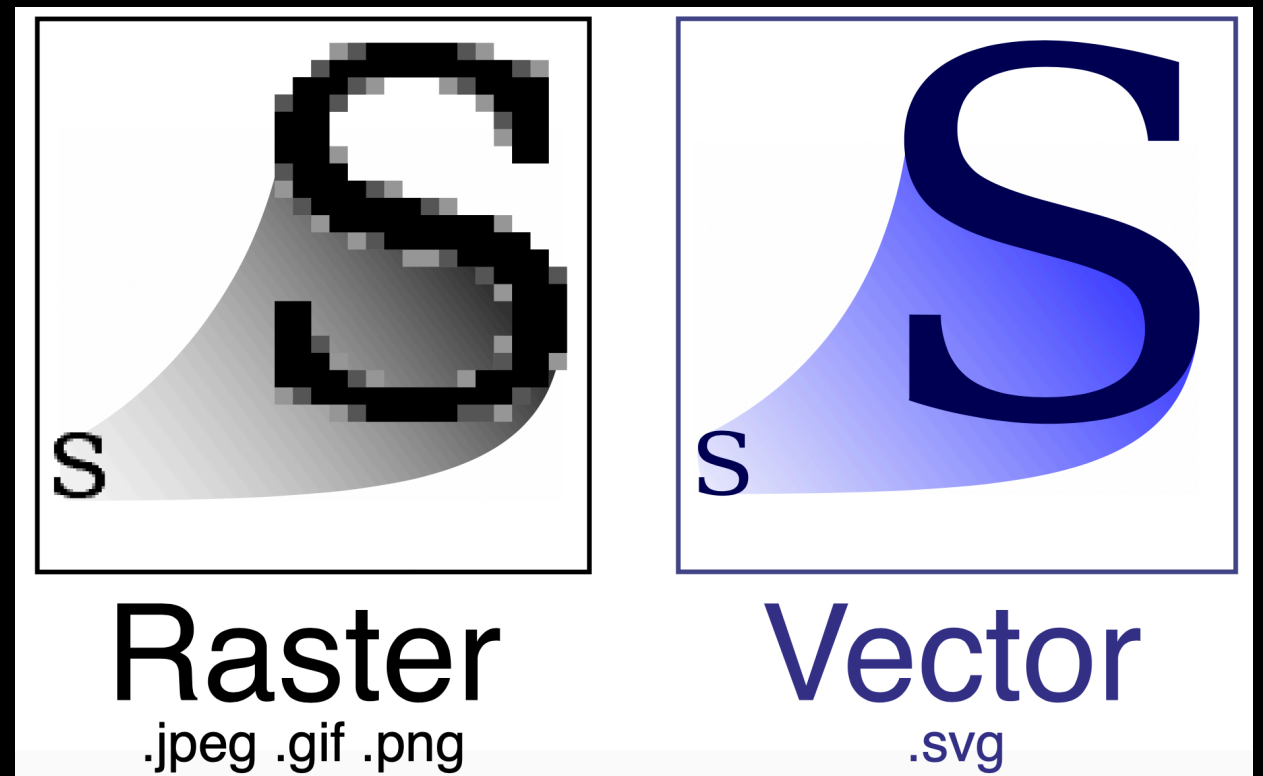
Renderific

An SVG renderer for 8-bit computers

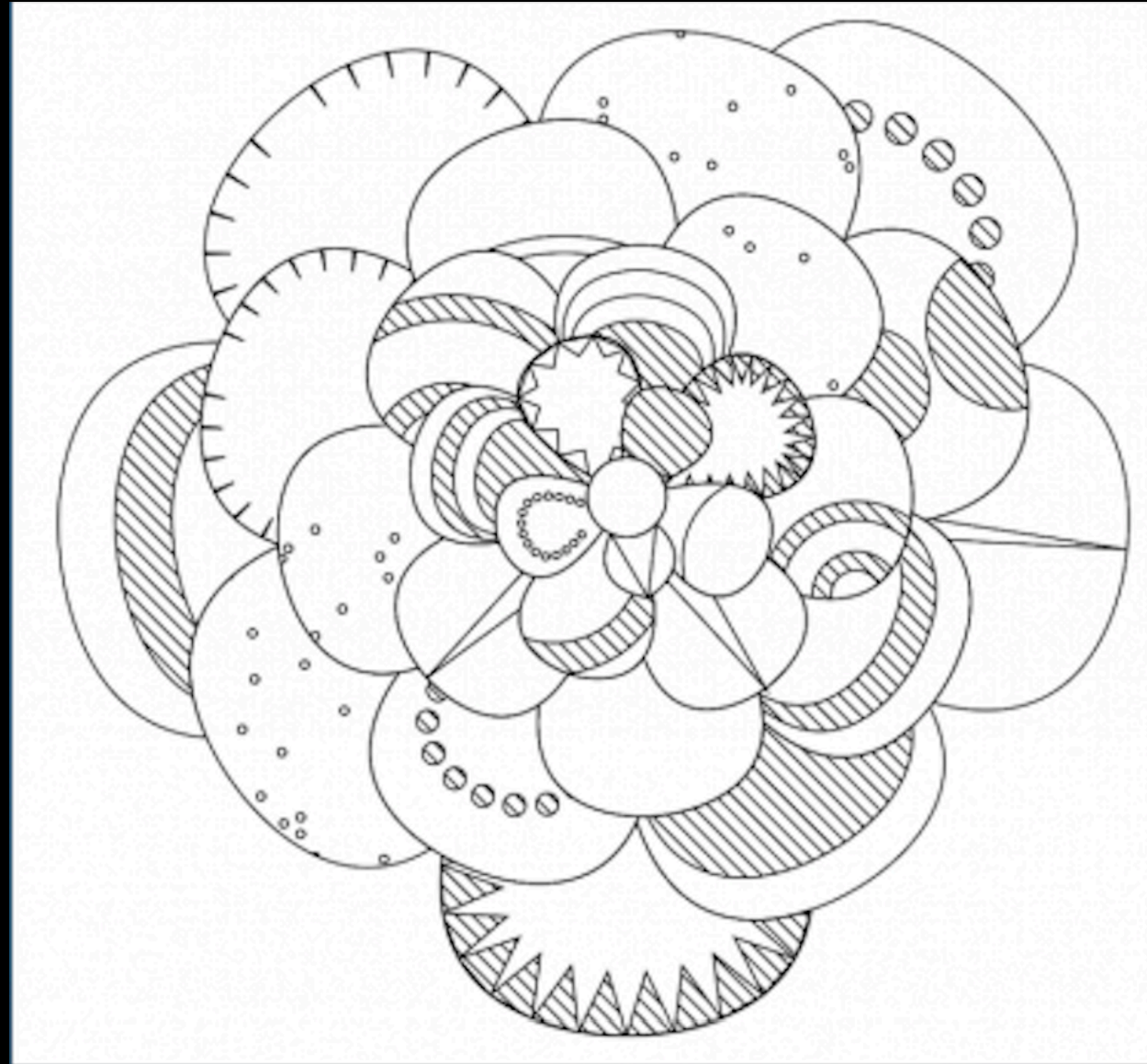
@KevinSavetz

Scalable Vector Graphics

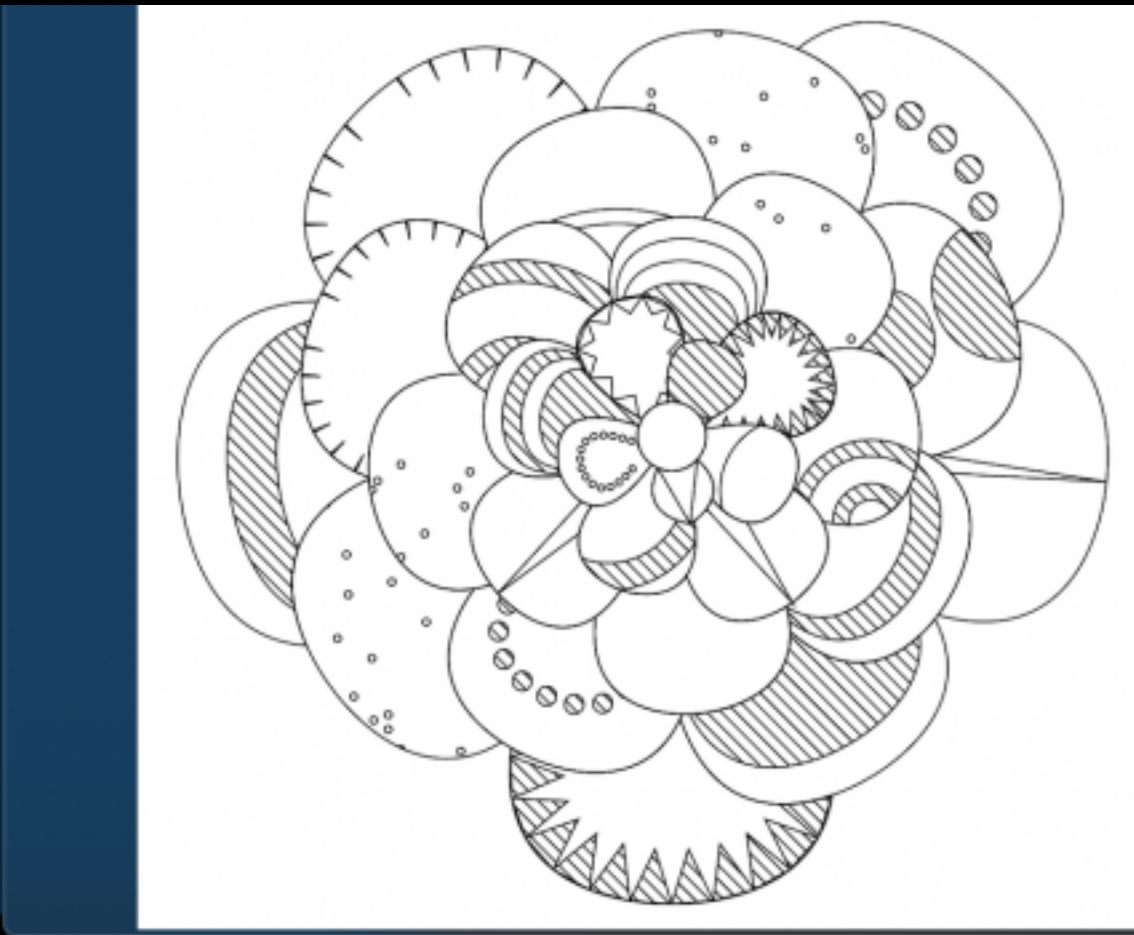
- SVG is an XML-based vector image format for two-dimensional graphics with support for interactivity and animation. The SVG specification is an open standard developed by the World Wide Web Consortium (W3C) since 1999. SVG images and their behaviors are defined in XML text files.

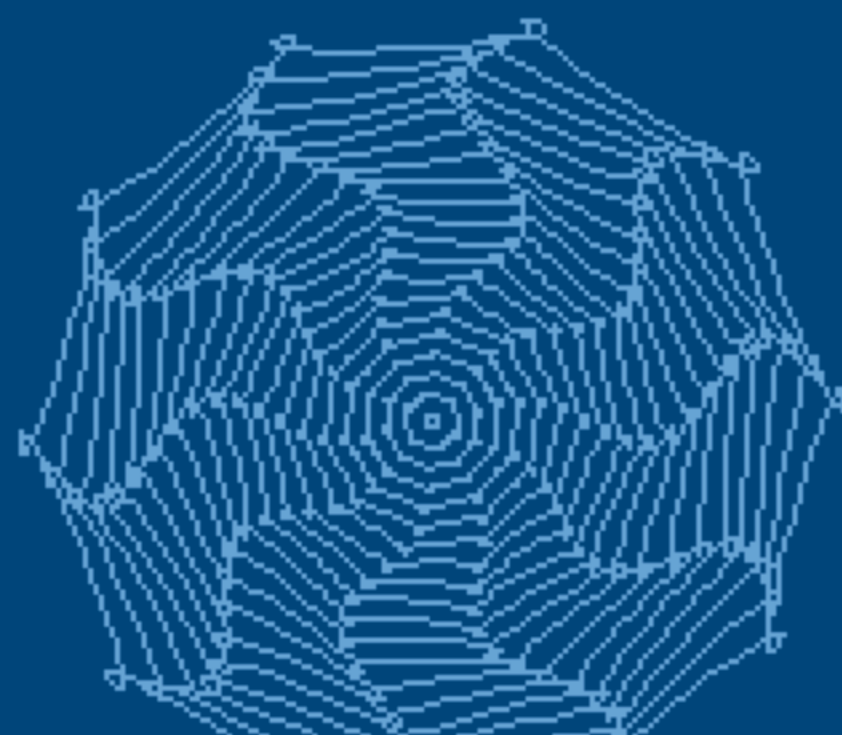


```
<path d="M31.99 1.365C21.287 7.72.2 31.945 0 38.298v10.516C0 62.144 12.46 73.86 23.773
73.86c13.584 0 24.902-11.258 24.903-24.62 0 13.362 10.93 24.62 24.515 24.62 13.586 0
24.165-11.258 24.165-24.62 0 13.362 11.622 24.62 25.207 24.62h.246c13.586 0 25.208-11.258
25.208-24.62 0 13.362 10.58 24.62 24.164 24.62 13.585 0 24.515-11.258 24.515-24.62 0
13.362 11.32 24.62 24.903 24.62 11.313 0 23.773-11.714
23.773-25.046V38.298c-.2-6.354-21.287-30.58-31.988-36.933C180.118.197 157.056-.005 122.685
0c-34.37.003-81.228.54-90.697 1.365zm65.194 66.217a28.025 28.025 0 0 1-4.78 6.155c-5.128
5.014-12.157 8.122-19.906 8.122a28.482 28.482 0 0
1-19.948-8.126c-1.858-1.82-3.27-3.766-4.563-6.032l-.006.004c-1.292 2.27-3.092 4.215-4.954
6.037a28.5 28.5 0 0 1-19.948 8.12c-.934 0-1.906-.258-2.692-.528-1.092 11.372-1.553
22.24-1.716 30.164l-.002.045c-.02 4.024-.04 7.333-.06 11.93.21 23.86-2.363 77.334 10.52
90.473 19.964 4.655 56.7 6.775 93.555 6.788h.006c36.854-.013 73.59-2.133 93.554-6.788
12.883-13.14 10.31-66.614
10.52-90.474-.022-4.596-.04-7.905-.06-11.93l-.003-.045c-.162-7.926-.623-18.793-1.715-30.
165-.786.27-1.757.528-2.692.528a28.5 28.5 0 0
1-19.948-8.12c-1.862-1.822-3.662-3.766-4.955-6.037l-.006-.004c-1.294 2.266-2.705
4.213-4.563 6.032a28.48 28.48 0 0 1-19.947 8.125c-7.748 0-14.778-3.11-19.906-8.123a28.025
28.025 0 0 1-4.78-6.155 27.99 27.99 0 0 1-4.736 6.155 28.49 28.49 0 0 1-19.95 8.124c-.27
0-.54-.012-.81-.02h-.007c-.27.008-.54.02-.813.02a28.49 28.49 0 0 1-19.95-8.123 27.992
27.992 0 0 1-4.736-6.155zm-20.486 26.49l-.002.01h.015c8.113.017 15.32 0 24.25 9.746
7.028-.737 14.372-1.105 21.722-1.094h.006c7.35-.01 14.694.357 21.723 1.094 8.93-9.747
16.137-9.73 24.25-9.746h.014l-.002-.01c3.833 0 19.166 0 29.85 30.007L210 165.244c8.504
30.624-2.723 31.373-16.727 31.4-20.768-.773-32.267-15.855-32.267-30.935-11.496
1.884-24.907 2.826-38.318 2.827h-.006c-13.412 0-26.823-.943-38.318-2.827 0 15.08-11.5
30.162-32.267 30.935-14.004-.027-25.23-.775-16.726-31.4L46.85 124.08c10.684-30.007
26.017-30.007 29.85-30.007zm45.985 23.582v.006c-.02.02-21.863 20.08-25.79
27.215l14.304-.573v12.474c0 .584 5.74.346 11.486.08h.006c5.744.266 11.485.504
11.485-.08v-12.474l14.304.573c-3.928-7.135-25.79-27.215-25.79-27.215v-.006l-.003.002z"/>
```









Scale: 2
Resolution: 640x384
Render time: 660.73 seconds■

ATARI 800

XHI=800 YHI=155.509
Render time: 668.55 seconds

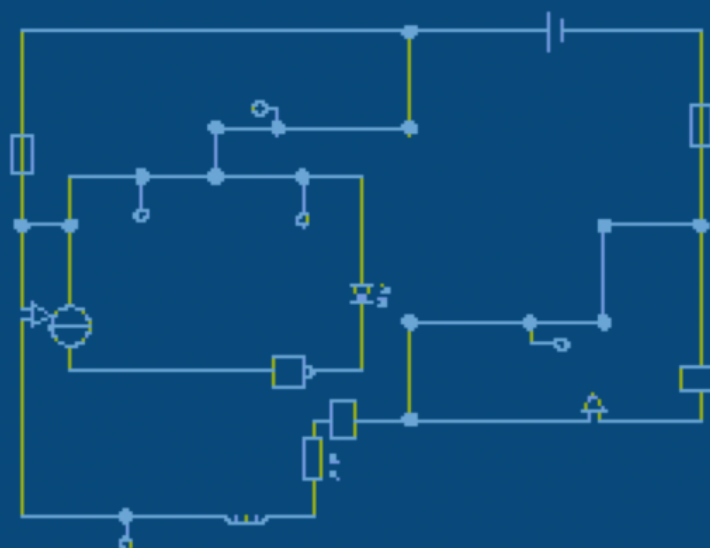
ANTIC

The Atari 8-Bit Podcast

Scale: 3
Resolution: 960x576
XHI=883.946 YHI=449.438
Render time: 225.43 seconds



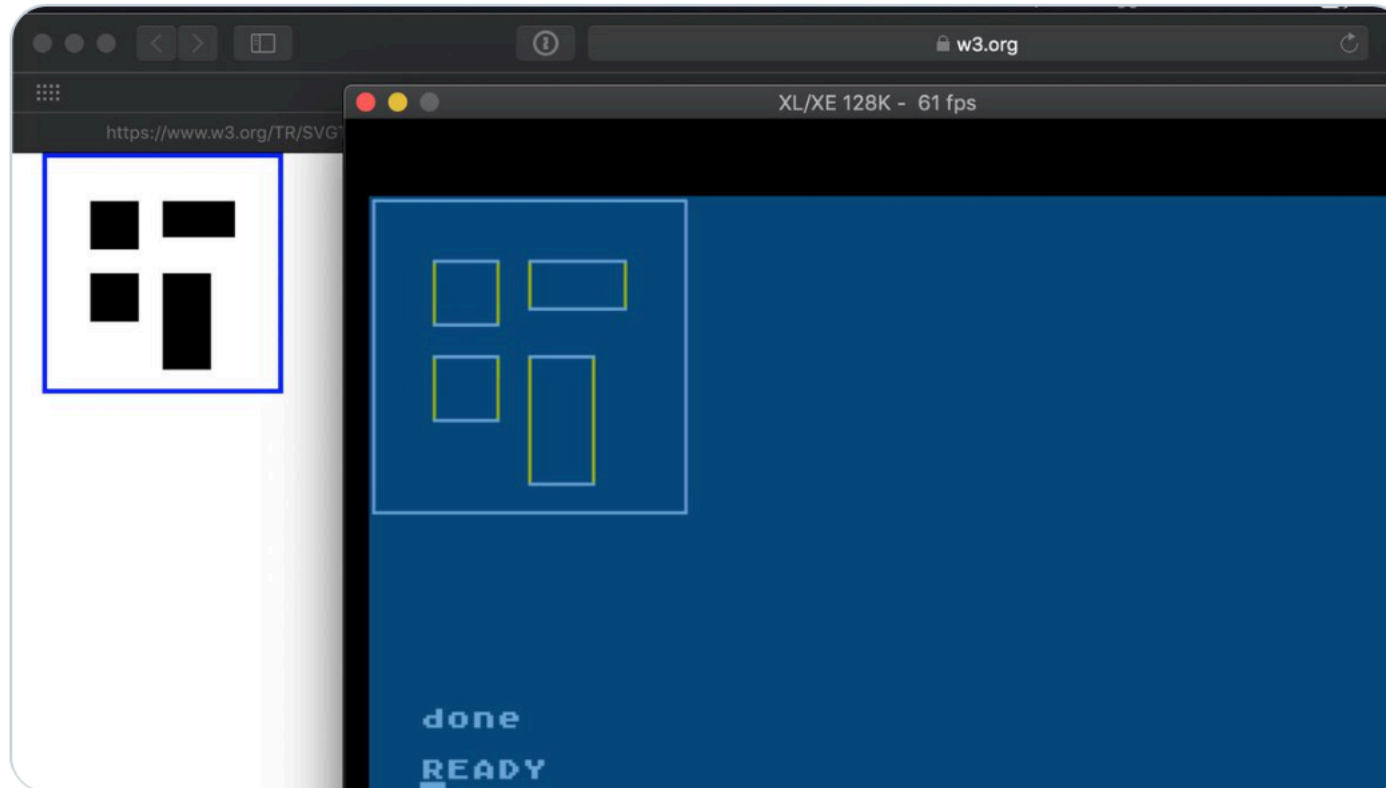
Scale: 1
Resolution: 320x192
XHI=279 YHI=159
Render time: 187.56 seconds





Kevin Savetz @ KansasFest @KevinSavetz · Feb 18

Today's stupid project was to see if I could write a BASIC program to render a SVG files on the Atari 8-bit computer. Success! Only rectangles so far, but it's something.



12

12

113






Kevin Savetz @ KansasFest @KevinSavetz · Feb 18

Added circles and ellipses



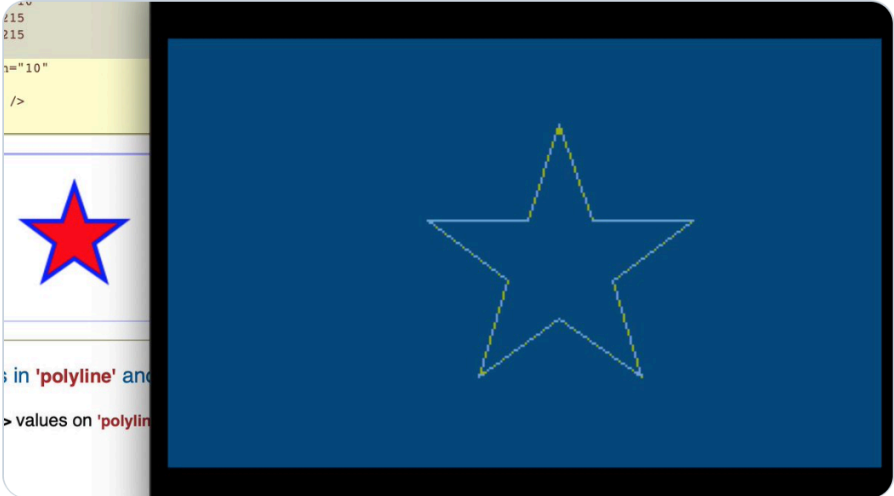
1

14




Kevin Savetz @ KansasFest @KevinSavetz · Feb 19

Added line, polyline, and polygon.



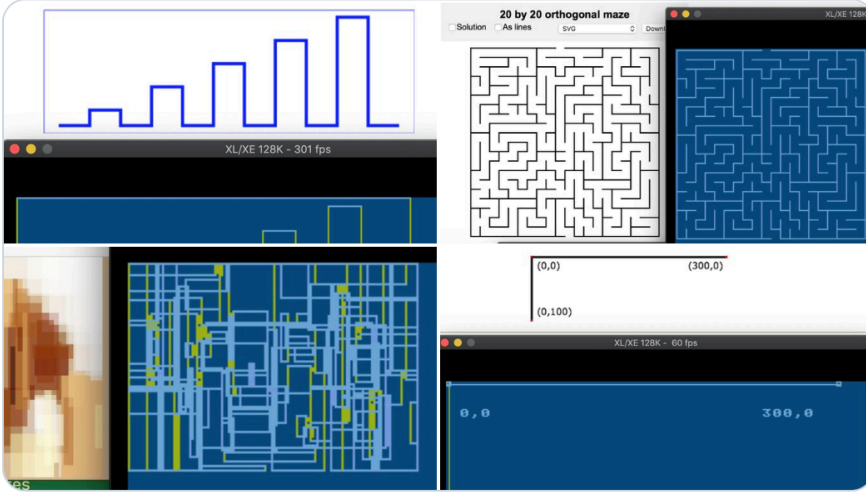
1

23



Kevin Savetz @ KansasFest @KevinSavetz · Feb 20

Added text rendering, absolute path line drawing (MZLVH commands,) and automatic scaling



4

1

20



Kevin Savetz @ KansasFest @KevinSavetz · Feb 20

maybe relative paths need work



1

1

9



Kevin Savetz @ KansasFest @KevinSavetz · Feb 20

maybe new flag is appropriate for current America

4

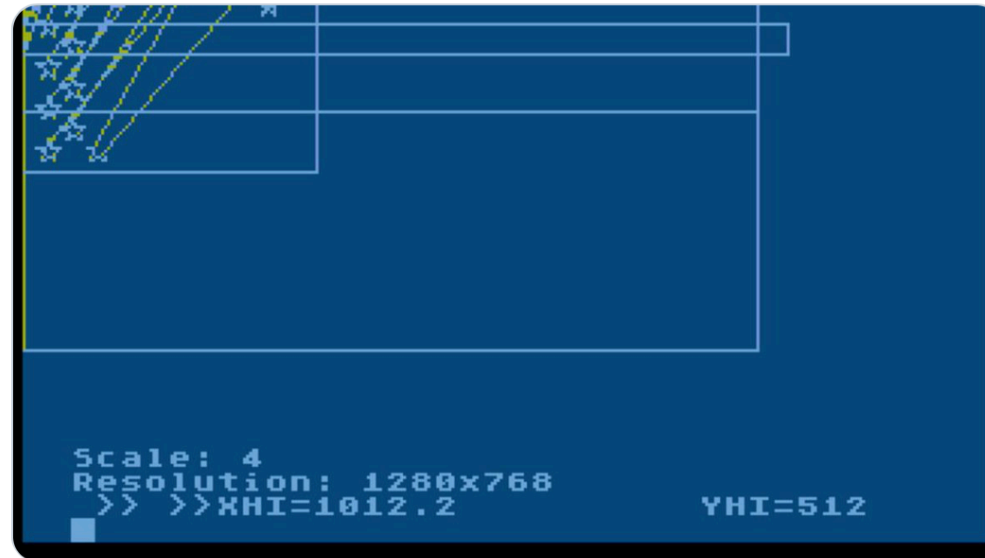
1

15



Kevin Savetz @ KansasFest @KevinSavetz · Feb 23

'Merica

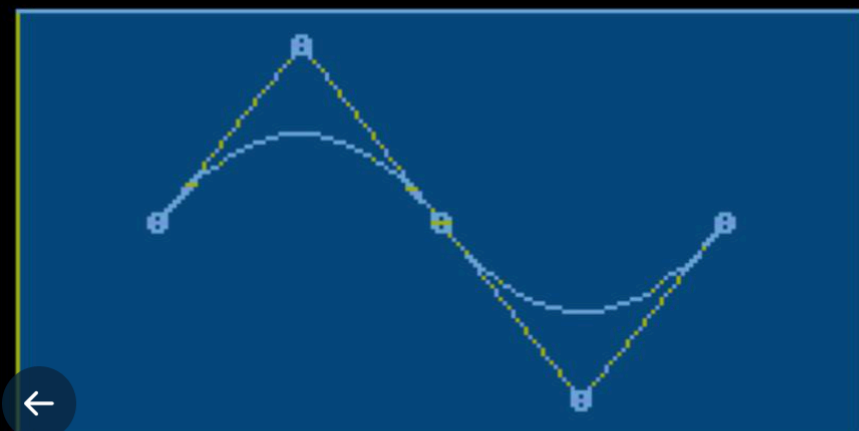


4

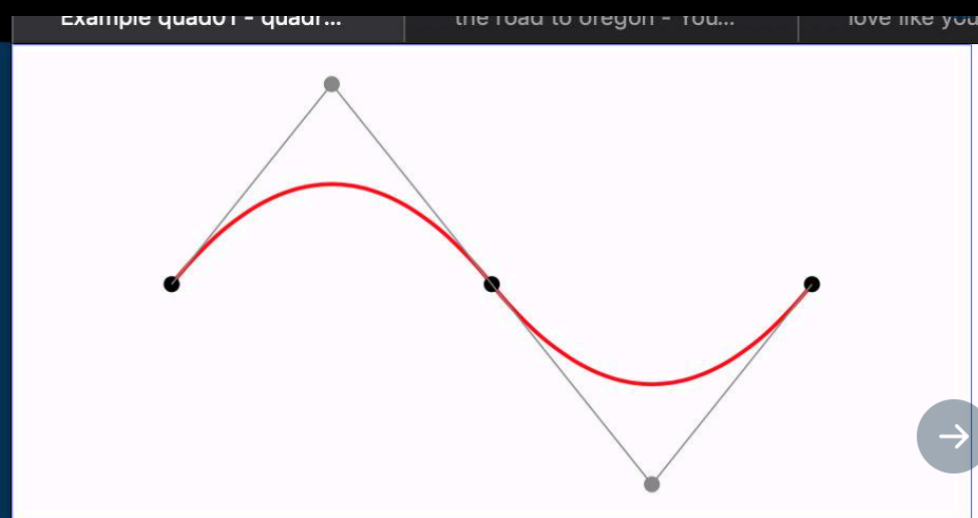


12





Scale: 6
Resolution: 1920x1152
XHI=1199 YHI=599
Render time: 21.33 seconds





Kevin Savetz @ KansasFest @KevinSavetz · Mar 1

My buddy @BillLange1968 has a plotter. It works!! #plottertwitter



3



35



```

<?xml version="1.0" standalone="no"?>
<!DOCTYPE svg PUBLIC "-//W3C//DTD SVG 1.1//EN"
"http://www.w3.org/Graphics/SVG/1.1/DTD/svg11.dtd">
<svg width="444" height="385.051177665153" version="1.1"
xmlns="http://www.w3.org/2000/svg">
  <title>Triangular delta maze with 20 cells side</title>
  <desc>Triangular delta maze with 20 cells side generated by The Maze Generator Website
(http://www.mazegenerator.net/).</desc>
  <g fill="none" stroke="#000000" stroke-width="2" stroke-linecap="round"
stroke-linejoin="round">
    <line x1="200" y1="78.210235533030584" x2="222" y2="78.210235533030584" />
    <line x1="200" y1="116.31535329954589" x2="222" y2="116.31535329954589" />
    ...
    <polyline points="68,268.73582436560707 57,287.78838324886476 68,306.84094213212245"
/>
    <line x1="68" y1="344.94605989863771" x2="57" y2="363.9986187818954" />
    <line x1="79" y1="249.68326548234941" x2="68" y2="268.73582436560707" />
    <line x1="90" y1="230.63070659909181" x2="79" y2="249.68326548234944" />
    <line x1="90" y1="268.73582436560707" x2="79" y2="287.78838324886476" />
    <line x1="90" y1="344.94605989863771" x2="79" y2="363.9986187818954" />
    <line x1="79" y1="363.99861878189529" x2="90" y2="383.051177665153" />
    <line x1="101" y1="211.57814771583415" x2="90" y2="230.63070659909178" />
    <polyline points="101,249.68326548234941 90,268.73582436560707 101,287.78838324886476
90,306.84094213212245" />
    <line x1="101" y1="363.99861878189529" x2="112" y2="383.051177665153" />
    <line x1="123" y1="173.47302994931886" x2="112" y2="192.52558883257649" />
    <line x1="123" y1="211.57814771583415" x2="112" y2="230.63070659909178" />
    <line x1="112" y1="230.63070659909181" x2="123" y2="249.68326548234944" />

```




4am @a2_4am · Mar 4

Replying to [@KevinSavetz](#)

"Renderific"

All my Apple II related projects are MIT-licensed.



7





HACKADAY

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SVG RENDERING COMES TO 8-BIT ATARI COMPUTERS

by: [Tom Nardi](#)

 [5 Comments](#)

[f](#) [t](#) [g+](#)

March 8, 2019



<https://github.com/savetz/Renderific>

```

1  COMPILE
1000 DIM A$(500),QR$(1),F$(20),SX(150),
1001 SY(150)
1002 XMAX= 280
1003 YMAX= 192
1004 TEXT
1005 PRINT "Renderific"
1006 PRINT "Enter filename to render"
1007 PRINT "Default: IMAGE.SUG"
1008 INPUT F$
1009 WHEN F$ = "" THEN
1010 F$= "IMAGE.SUG"
1011 ENDWHEN
1012 PRINT : PRINT "Enter scale factor"
1013
1210 PRINT "1 is ";XMAX;"x";YMAX;"", 2 i
1220 S=XMAX * 2;"x";YMAX * 2;"", etc."
1230 PRINT "Default: 1"
1240 INPUT A$
1250 WHEN A$ = "" THEN
1260 S= 1
1270 ELSE
1280 ENDWHEN
1290 PRINT : PRINT "Debug window?"
1300 PRINT "0 is off, 1 is on"
1310 PRINT "Default: 0"
1320 INPUT A$
1330 WHEN A$ = "" THEN
1340 DEBUG= 0
1350 ELSE
1360 DEBUG= VAL (A$)
1370 ENDWHEN
1380 REM HGR
1400 POKE 49234 + DEBUG,1: REM ADD TEXT
1410 WINDOW WHEN DEBUG MODE IS 1
1500 WHEN DEBUG THEN
1510 PRINT "Scale: ";S
1520 PRINT "Resolution: ";XMAX * S;"x"
1530 YMAX * S
1540 ENDWHEN
1550 REM DISK "OPEN ";F$
1560 REM DISK "READ ";F$
1600 LOOP
1610 A$= ""
1620 REPEAT

```

```

1 REM DISK "OPEN ";F$
1 REM DISK "READ ";F$
1 LOOP
1 A$= ""
1 REPEAT
1 GET C$
1 REM allow ,-. / : ; <=> ? @ " and spa
1 and A-Z a-z
1 WHEN ((C$ > = "." AND C$ < =
1 ) OR (C$ > = "a" AND C$ < = "z"))
1 THEN
1 A$= A$ + C$
1 ENDWHEN
1 WHEN C$ = " " OR C$ = CHR$ (3
1 ) THEN
1 A$= A$ + C$
1 ENDWHEN
1 PRINT A$
1 UNTIL C$ = ">": REM > is end of
1 e
1 ENDLOOP
1 DISK "CLOSE"

```

Fun places to get/make SVGs

Mazes: <http://www.mazegenerator.net>

Flowers: <https://bleeptrack.itch.io/overflow>

Twisted Polygon Generator: [https://
msurguy.github.io/polygon-tool/](https://msurguy.github.io/polygon-tool/)

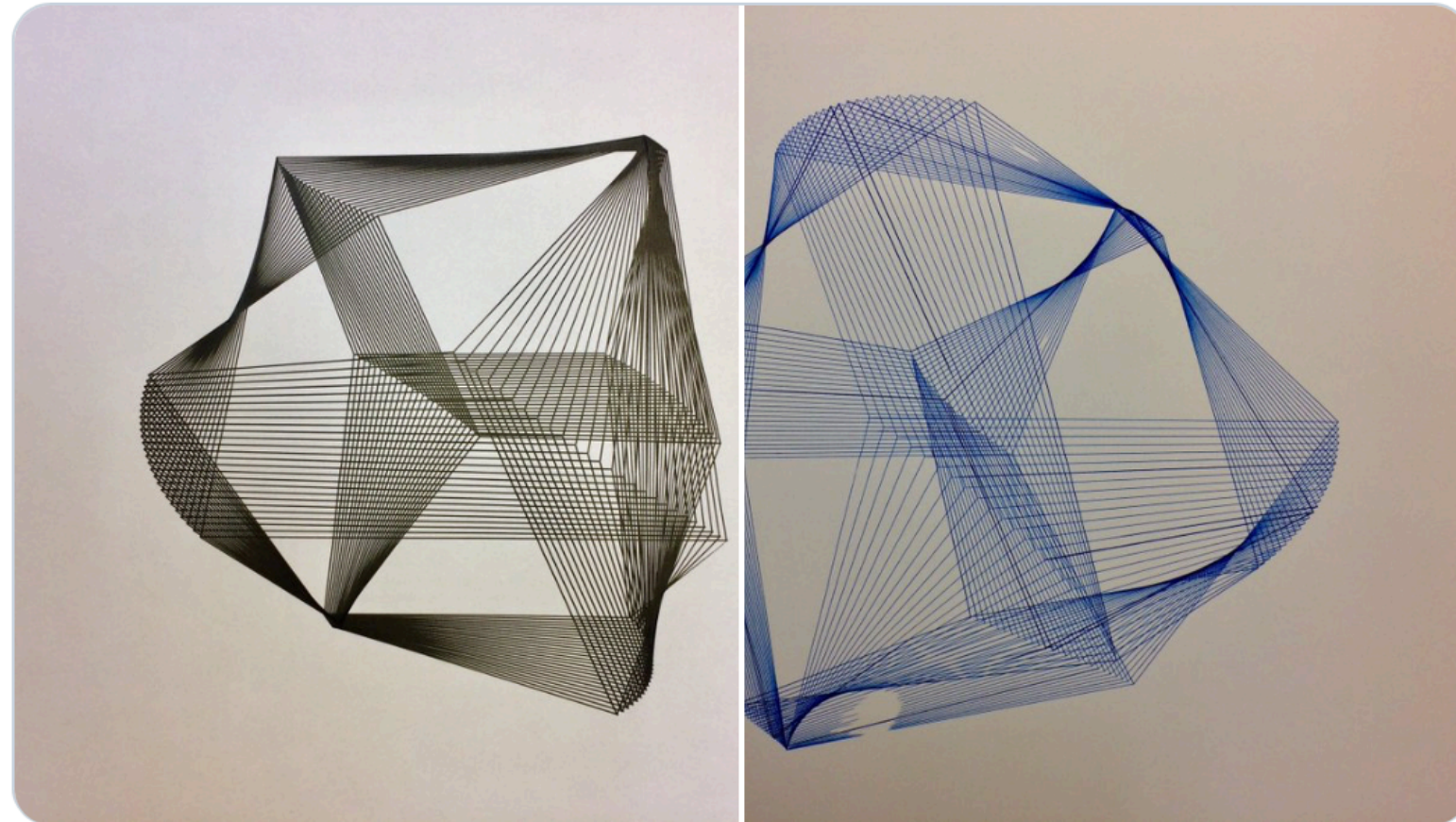
Flags: <https://github.com/lipis/flag-icon-css>

#PlotterTwitter rabbit hole



Saskia Freeke @sasj_nl · Dec 11, 2018

3D cubes tests with the plotter [#plottertwitter](#)

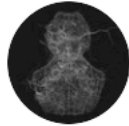




sean mullen @srmullen · 42m

Work in progress. [#generative](#) [#plottertwitter](#) [#creativecoding](#) [#axidraw](#)





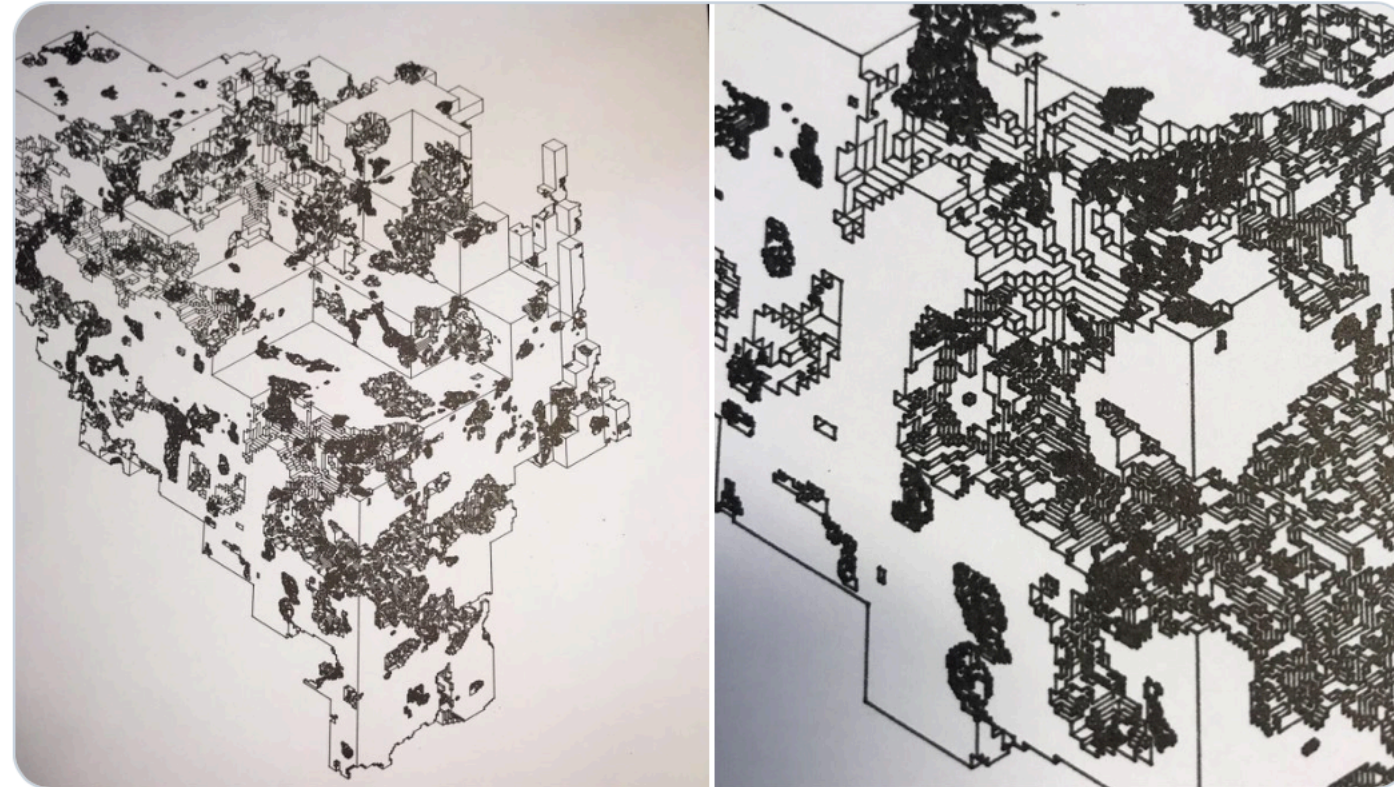
Frederik Vanhoutte @wblut · 22h

Iso 190719a

Staedtler pigment liner 0.05 on Bristol

2nd run, 8 hours

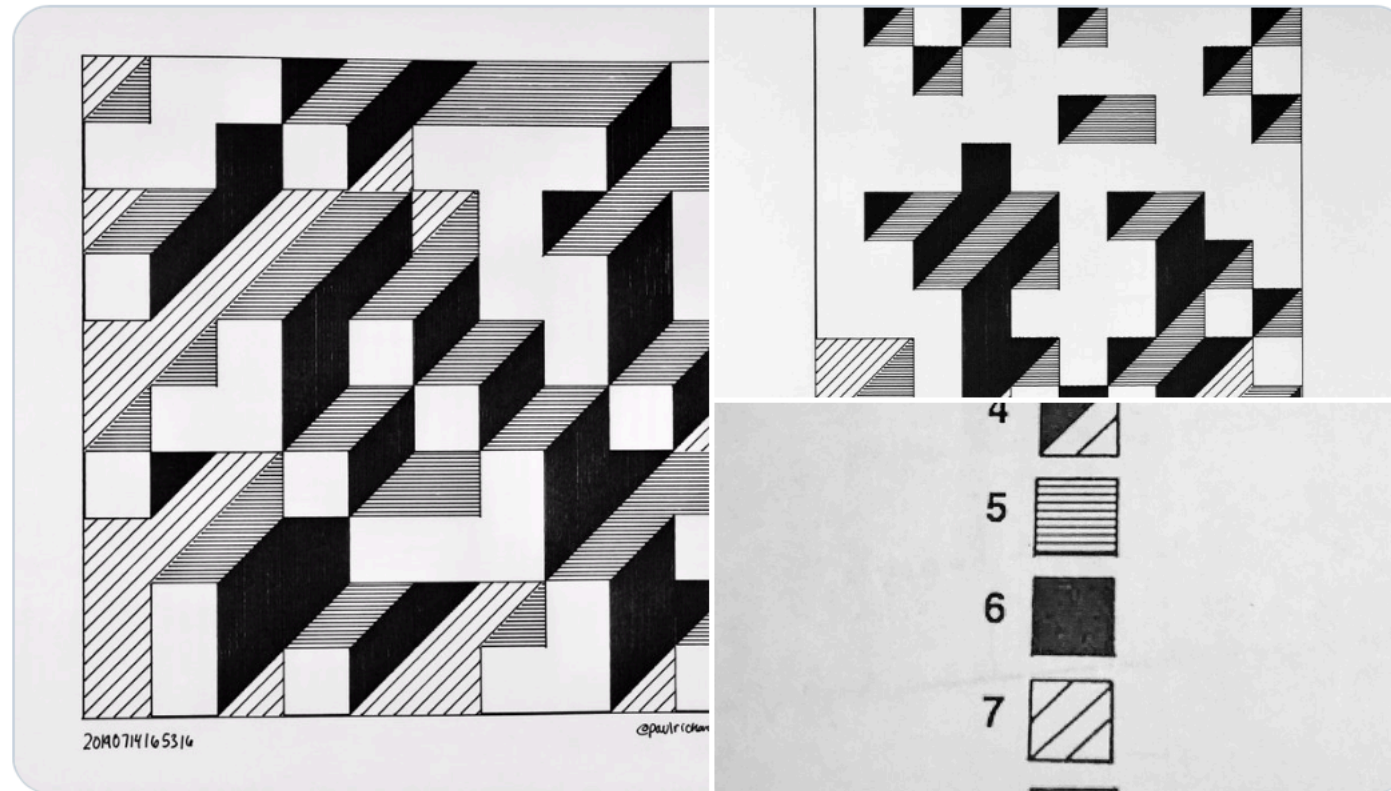
[#processing](#) [#CreativeCoding](#) [#PlotterTwitter](#)





Paul Rickards @paulrickards · Jul 14

Implementation of Edward Zajec's "Il Cubo" from 1971. Essentially a Truchet tile set of 8 tiles and rules for placement. Roland DXY-1200 [#plottertwitter](#)

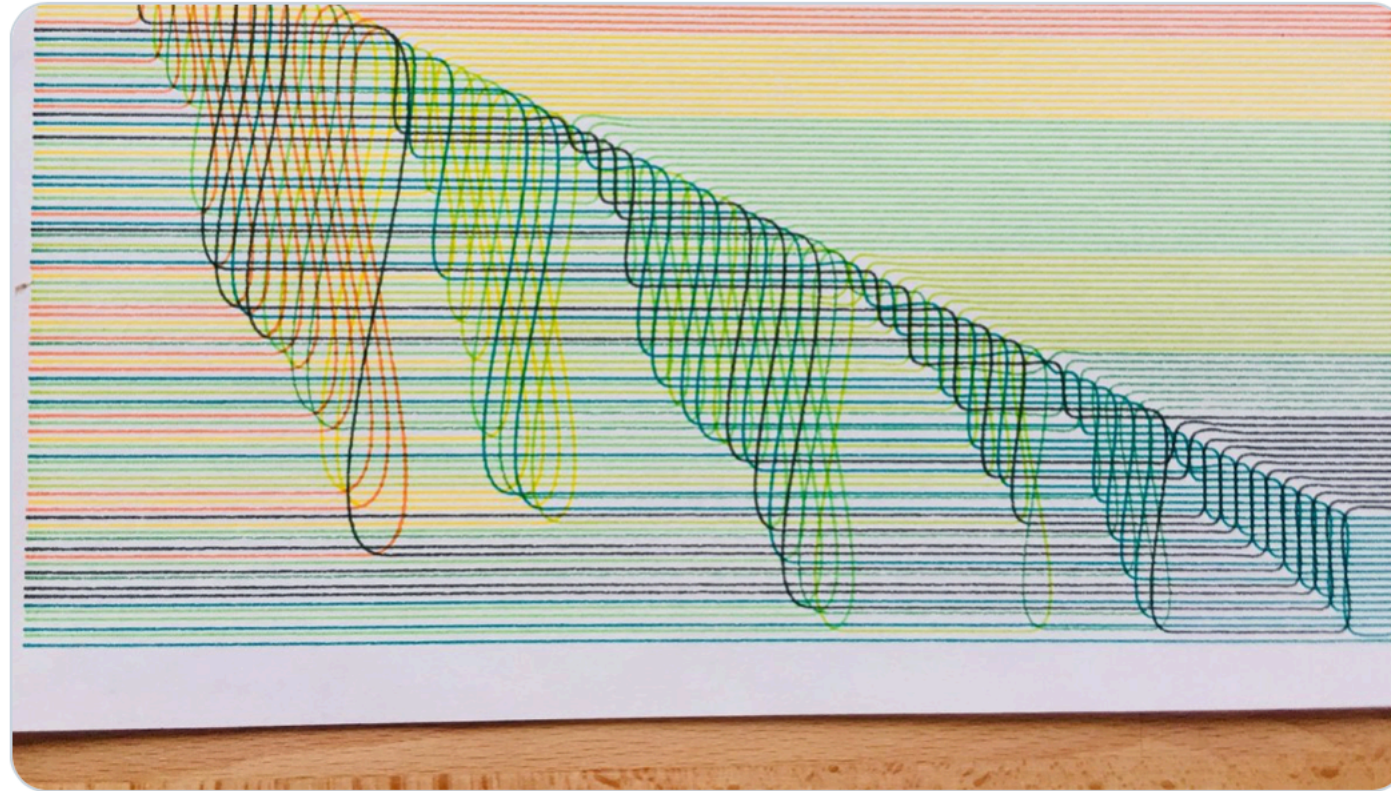




sean mullen @srmullen · Jul 8

Selection sort.

[#axidraw](#) [#generative](#) [#plottertwitter](#) [#creativecoding](#)





Paul Rickards @paulrickards · Jun 5

Entropy variation no. 3, rotated hatch gives a sense of flow. 24"x36" CMY on watercolor [#plottertwitter](#)



