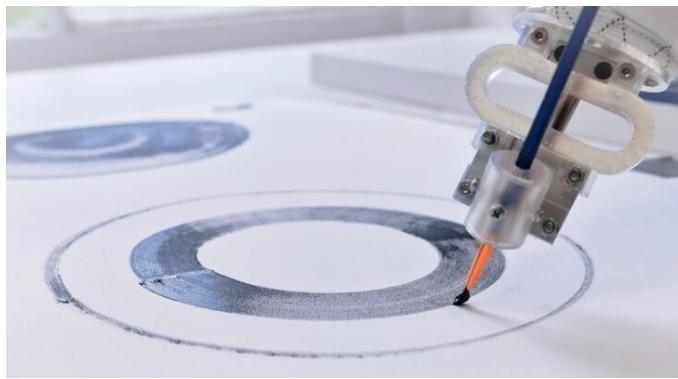
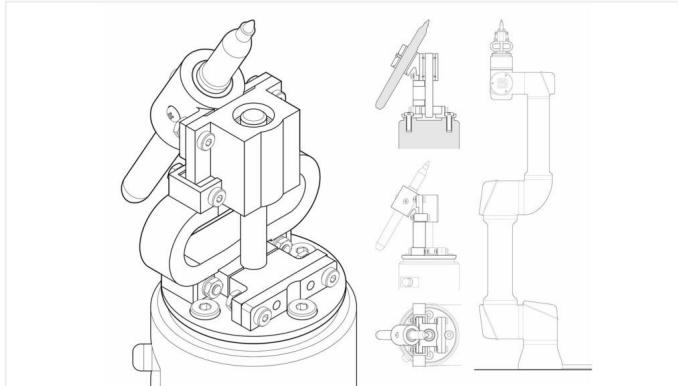
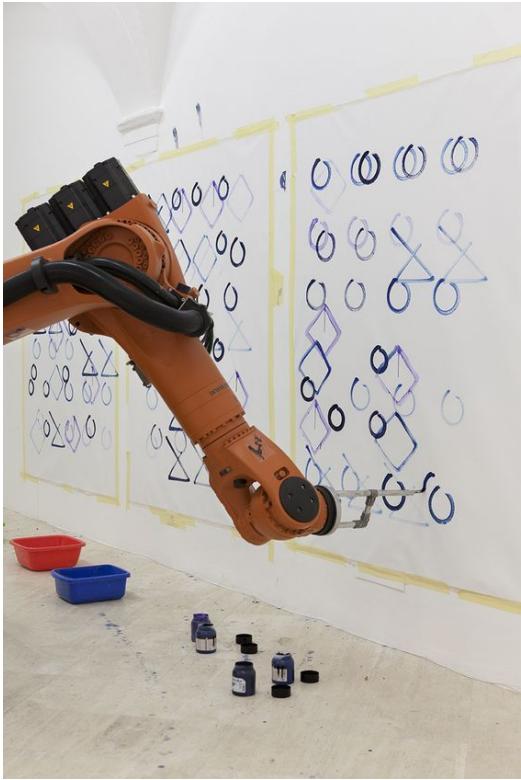
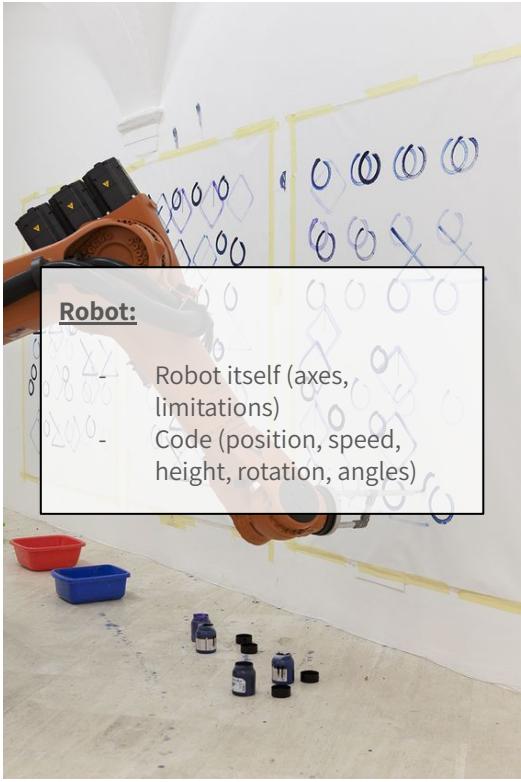


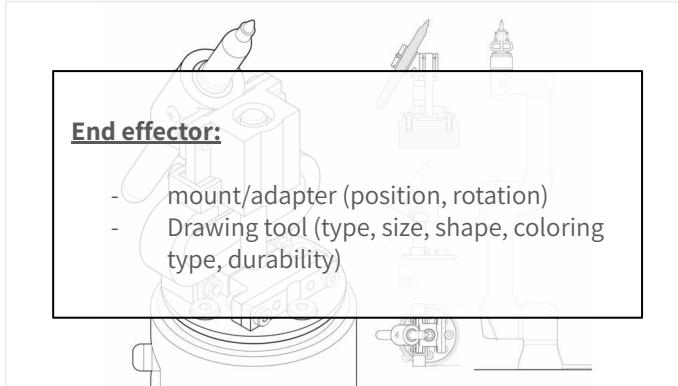
Robots_1stClass_Drawing





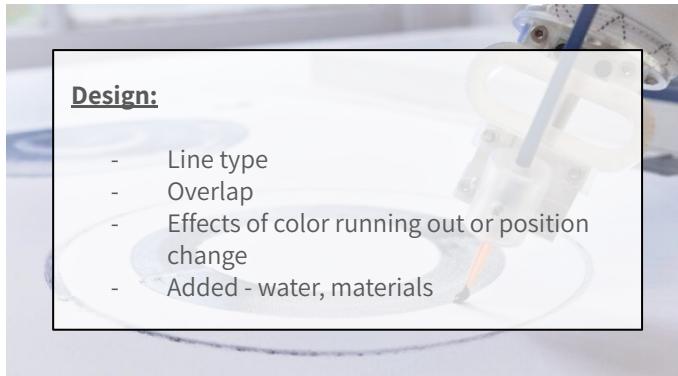
Robot:

- Robot itself (axes, limitations)
- Code (position, speed, height, rotation, angles)



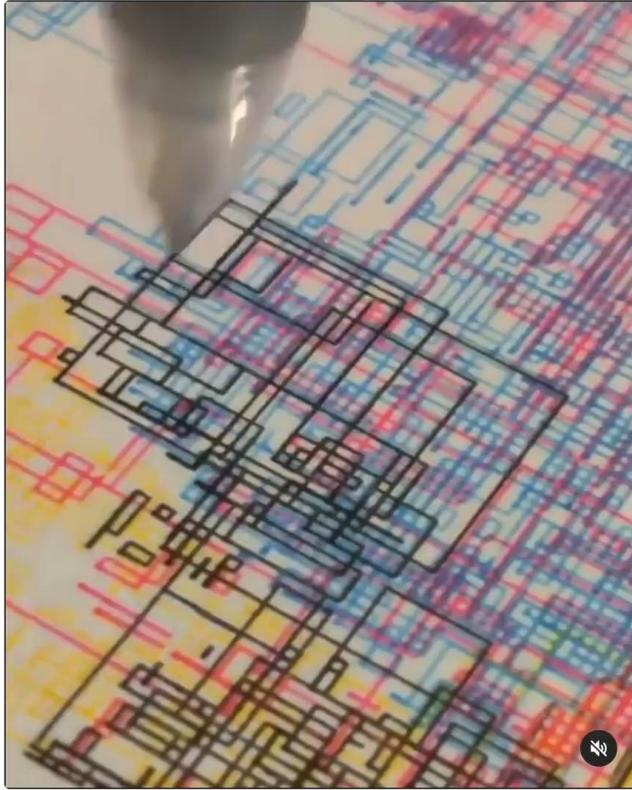
End effector:

- mount/adapter (position, rotation)
- Drawing tool (type, size, shape, coloring type, durability)

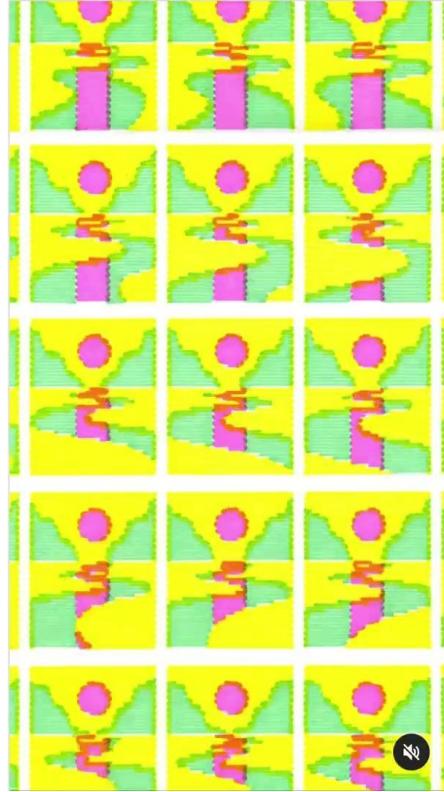


Design:

- Line type
- Overlap
- Effects of color running out or position change
- Added - water, materials



<https://www.instagram.com/reel/CQd-MosH3l/>

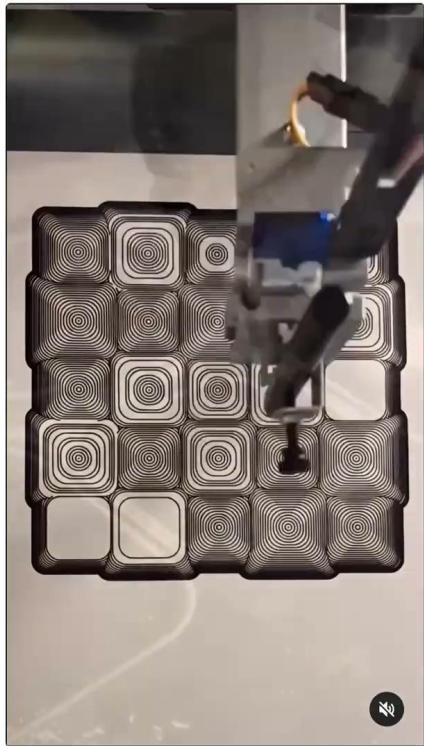


<https://www.instagram.com/p/CxT4tl-v6Je/>

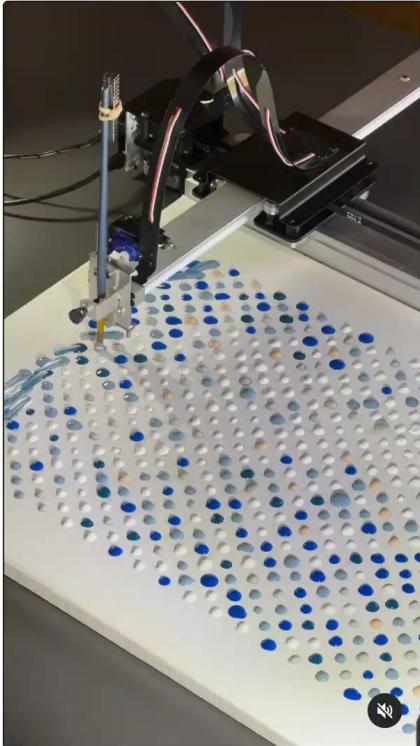


<https://www.instagram.com/p/C3OTRWnP0fd/>

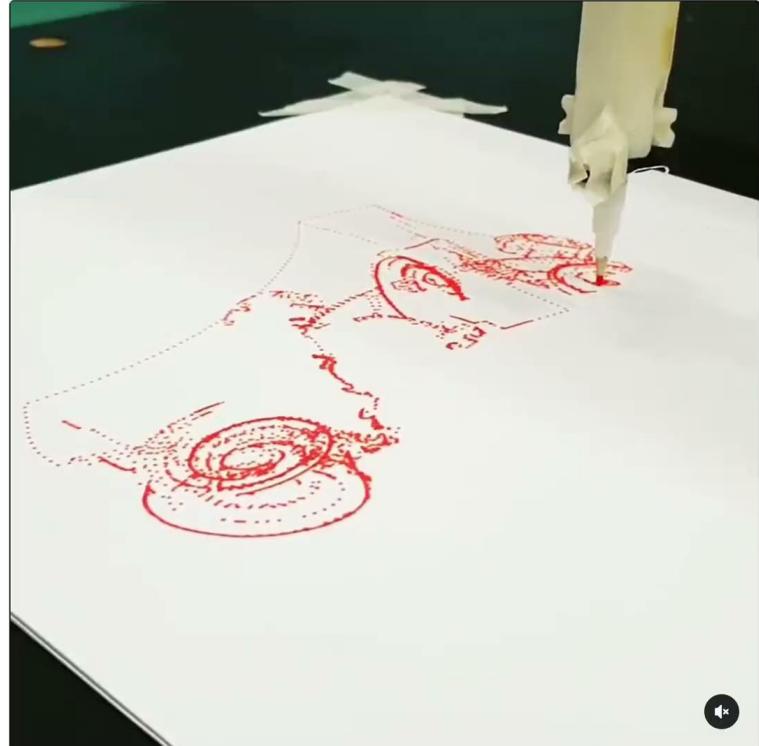
Basic - one color at a time, one height and position



<https://www.instagram.com/reel/C2gCv0yyi2d/>

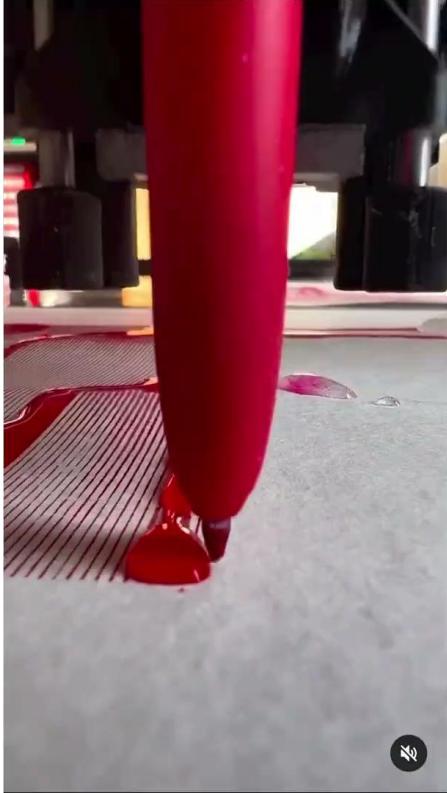


<https://www.instagram.com/p/C5WTdVZsrKI/>



https://www.instagram.com/p/BvY9ne_l6ig/

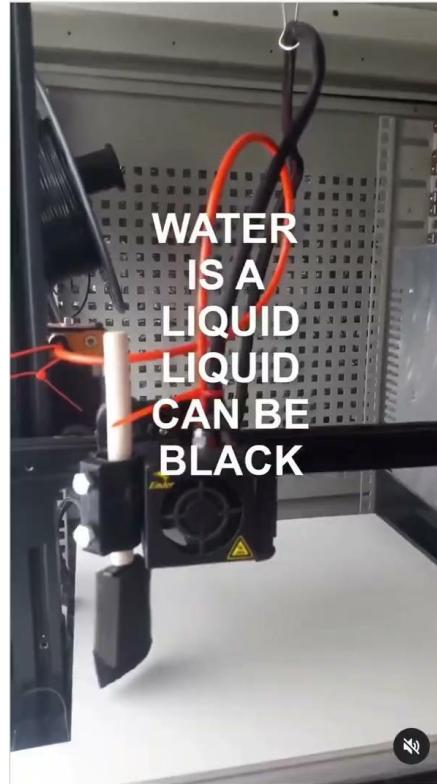
Basic - one color at a time, one height and position



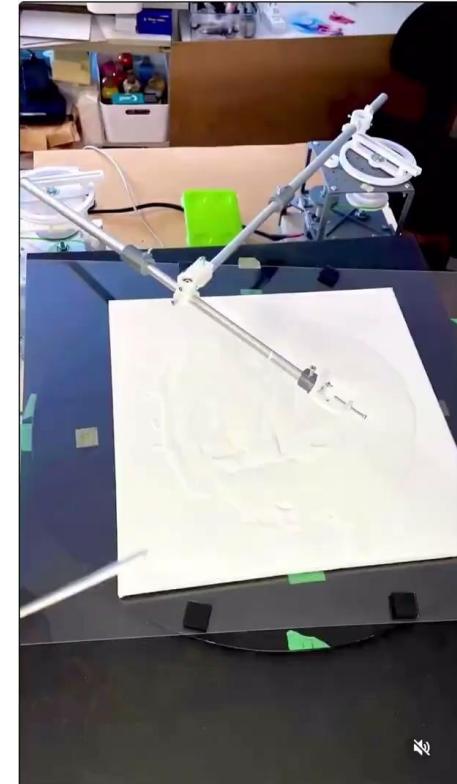
<https://www.instagram.com/p/C2N3rBGS2iV/>



<https://www.instagram.com/reel/C1vGPXmPTNE/>

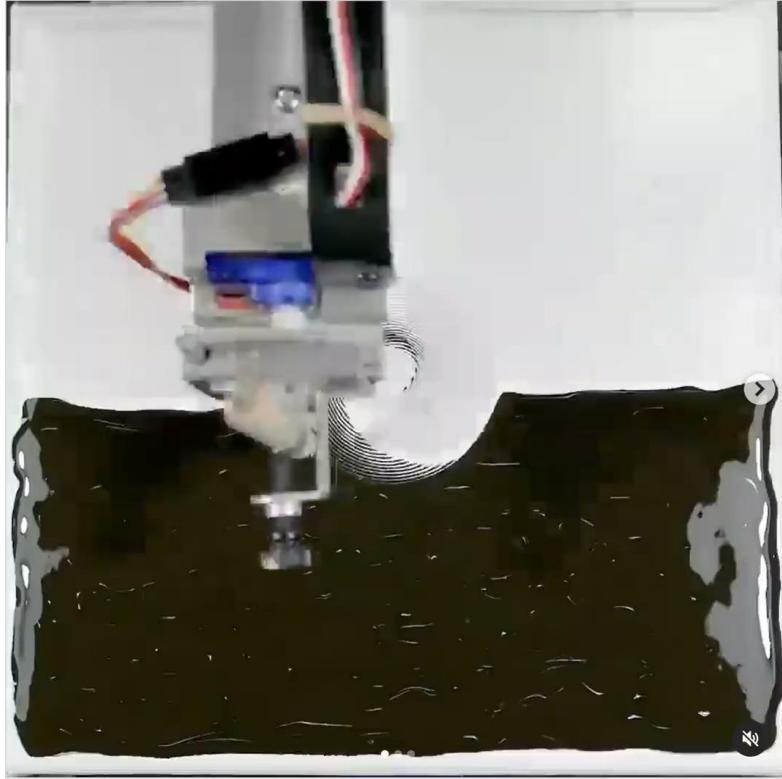


<https://www.instagram.com/reel/CufPhAhMYY6/>



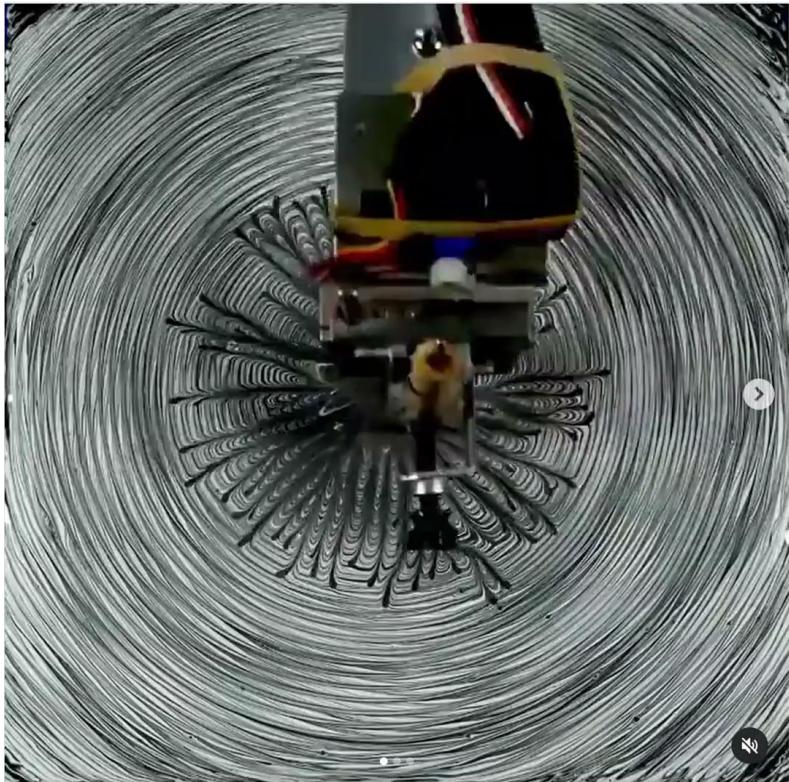
https://www.instagram.com/reel/CyL_CwSy0C/

Added - water, materials



https://www.instagram.com/p/CUvWtr4Pl8G/?img_index=1

Added - water, materials

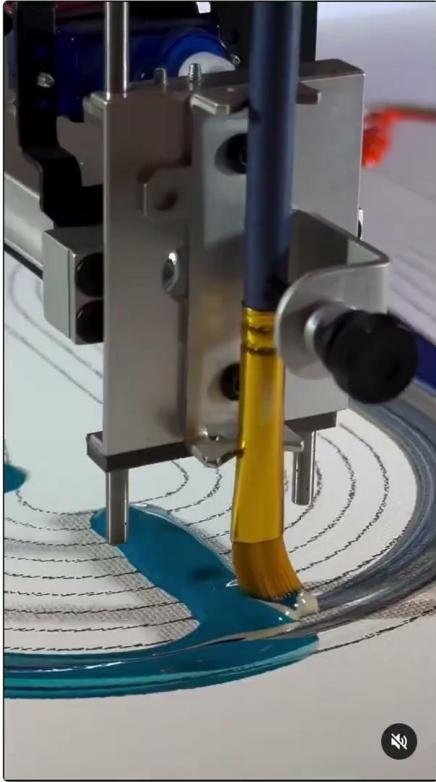


<https://www.instagram.com/p/CbYbUzEPHtV/>

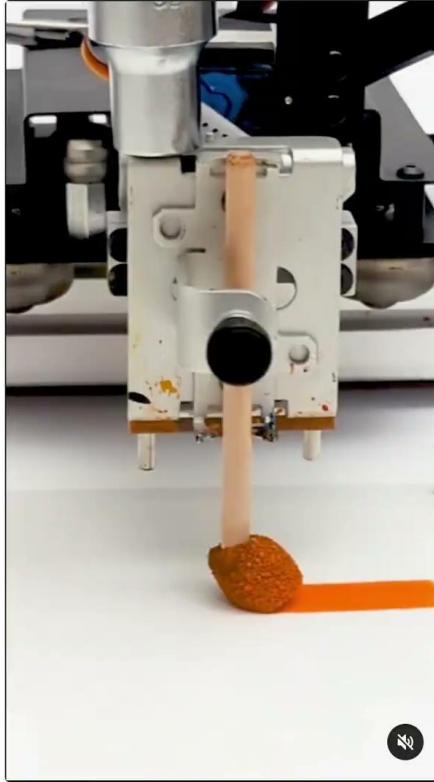


https://www.instagram.com/p/CoksLDFrwUA/?img_index=1

Added - water, materials



<https://www.instagram.com/reel/C3Go-jOPtdg/>



<https://www.instagram.com/p/CwdUBIEsnvE/>



https://www.instagram.com/reel/CpyOjz_DjjD/

Stroke design control - through material, code and end effector.



<https://www.instagram.com/p/CZnDLnpvl.nx/>



https://www.instagram.com/p/CV_LDM9hkI4/

Stroke design control - Pilot Parallel Pen: Varying Line Width With Just One Pen



<https://www.instagram.com/reel/C5J2CpFv6MV/>



<https://www.instagram.com/reel/C3yZ7hUvM5a/>



<https://www.instagram.com/reel/CthkHoHlxg4/>

Different material and tools

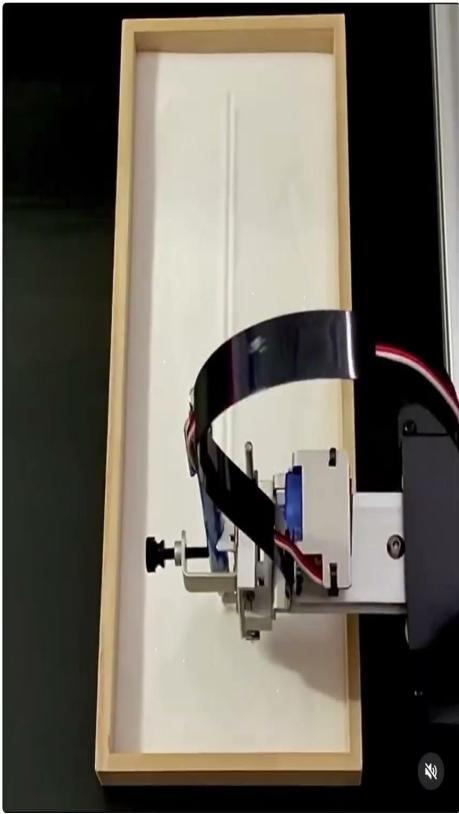


<https://www.instagram.com/reel/Cs4k9WgMOdJ/>



<https://www.instagram.com/reel/Csj4P8OOBNA/>

Different material and tools

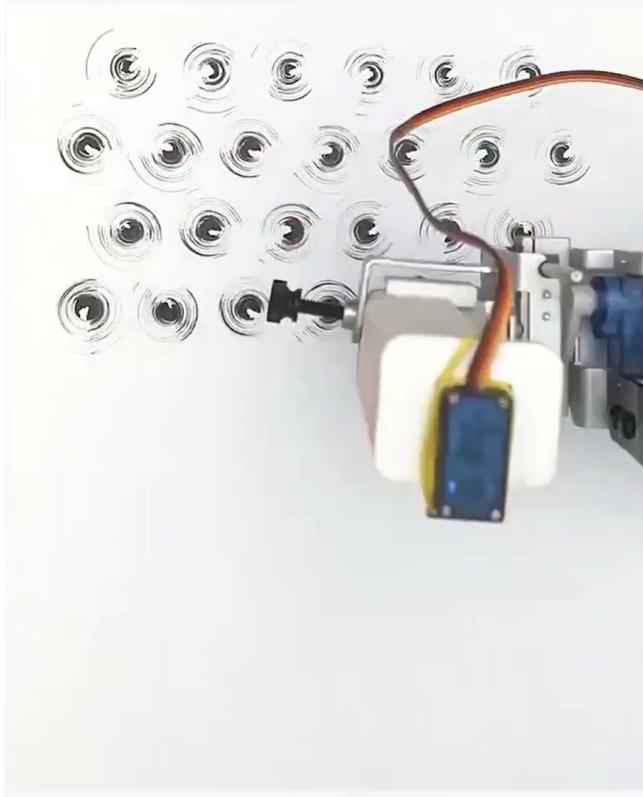


<https://www.instagram.com/reel/CSzajhCJzcE/>

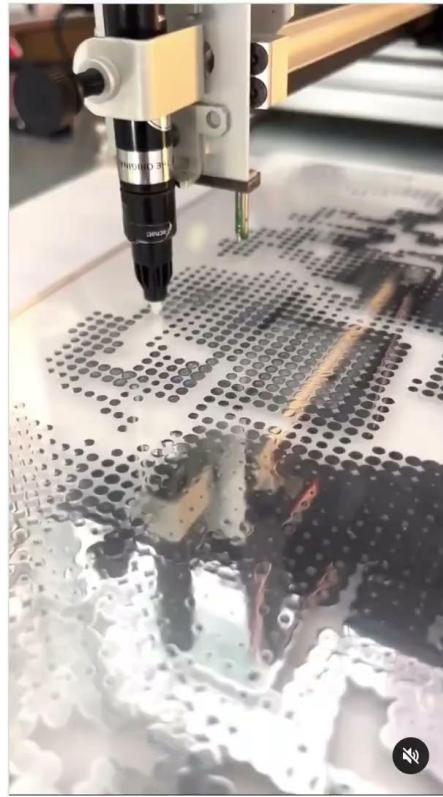


<https://gramaziokohler.arch.ethz.ch/web/e/lehre/211.html>

Sand



https://www.instagram.com/p/CqTtYCcvUX_/



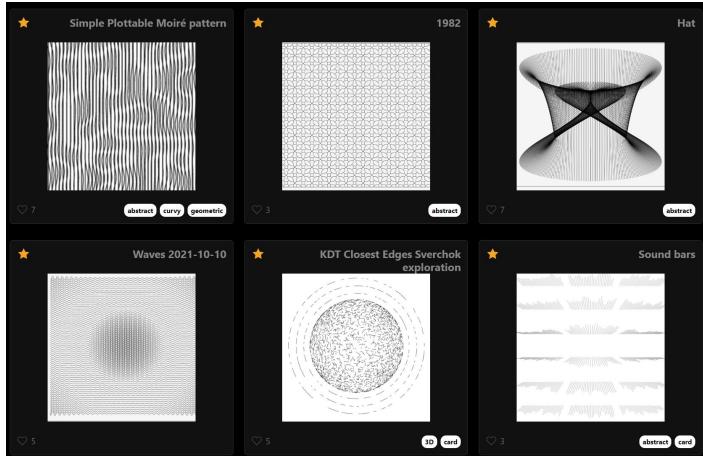
<https://www.instagram.com/p/Cx0EnowtB0M/>



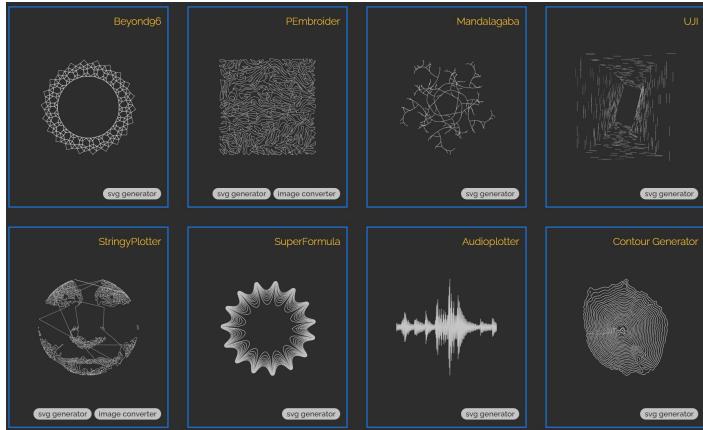
<https://www.instagram.com/reel/C3yZ7hUvM5a/>

Control the height, position and rotation

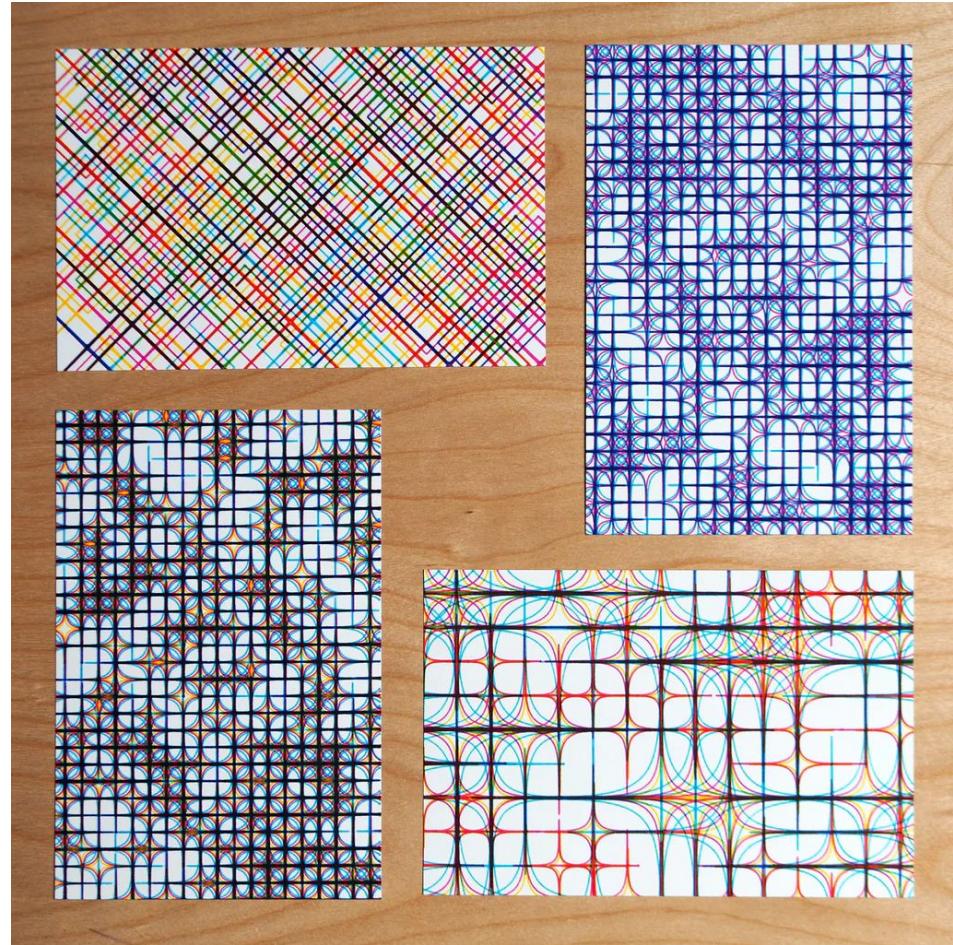
Links



<https://plotterfiles.com/>



<https://drawingbots.net/knowledge/tools>



<https://www.dirtalleydesign.com/blogs/news/how-to-generative-art>



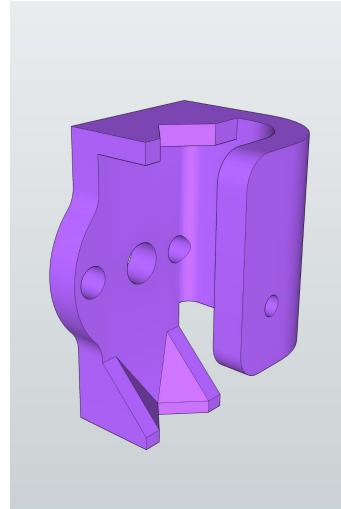
<https://www.printables.com/model/15322-baxter-robot-elastic-pen-holder>



<https://www.thingiverse.com/thing:4687207>



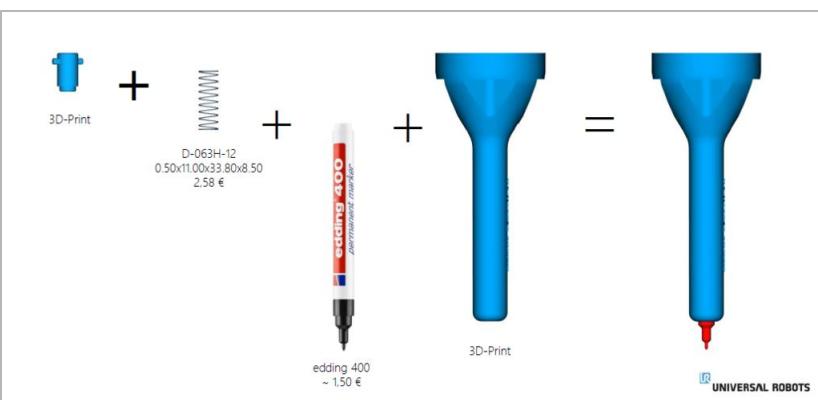
<https://www.thingiverse.com/thing:2251>



<https://cults3d.com/en/3d-model/tool/robust-pen-holder-for-drawing-robot>



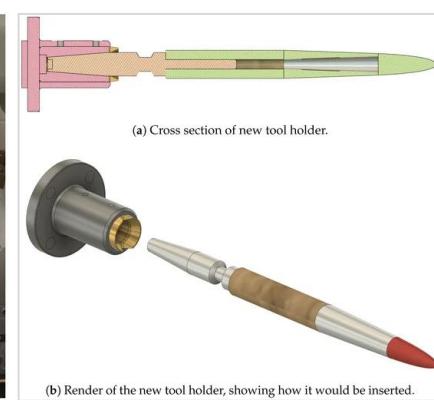
<https://cults3d.com/en/3d-model/gadget/fanuc-lr-mate-pencil-holder>



<https://www.thingiverse.com/thing:6381324>



<https://www.mdpi.com/2076-3417/10/10/3396>

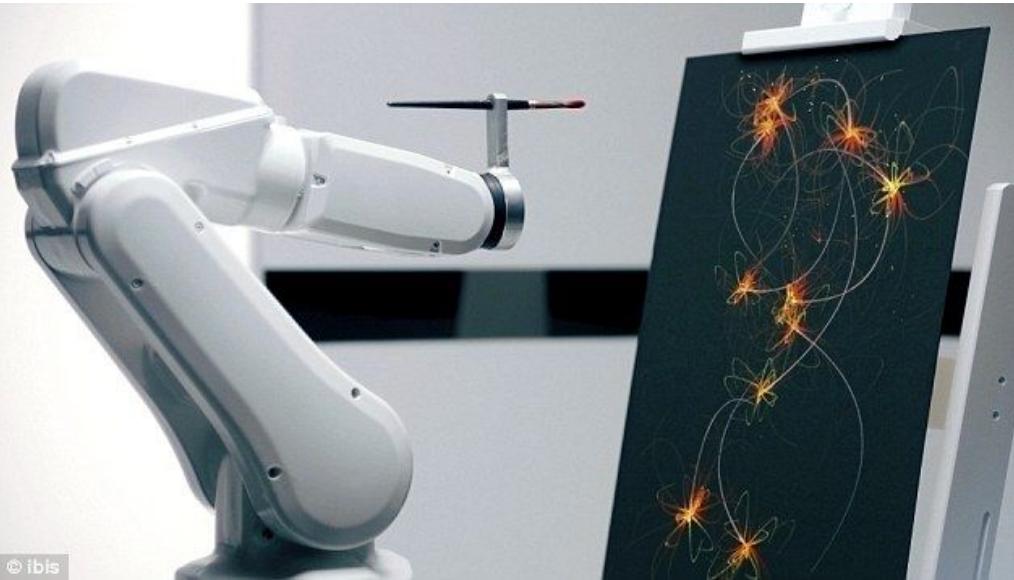


(b) Render of the new tool holder, showing how it would be inserted.



<https://www.flong.com/blog/2010/robotic-graffiti-tagger/>

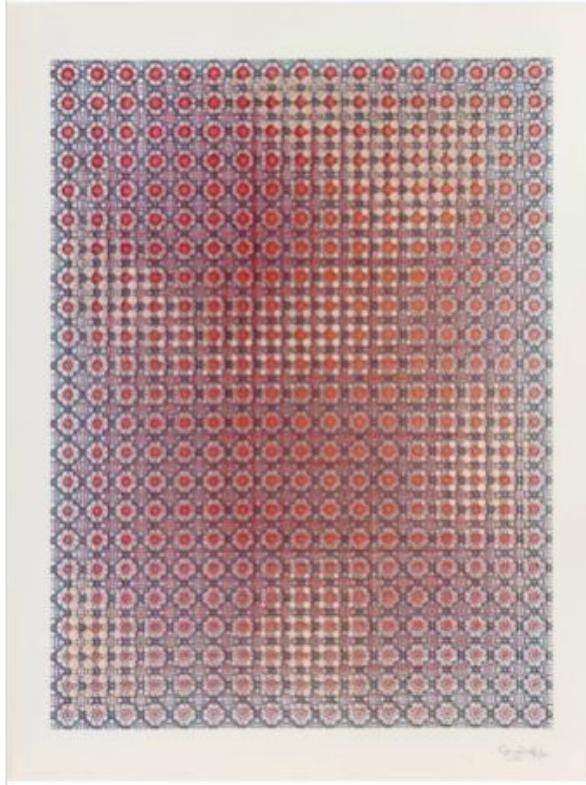
<https://vimeo.com/75215314>



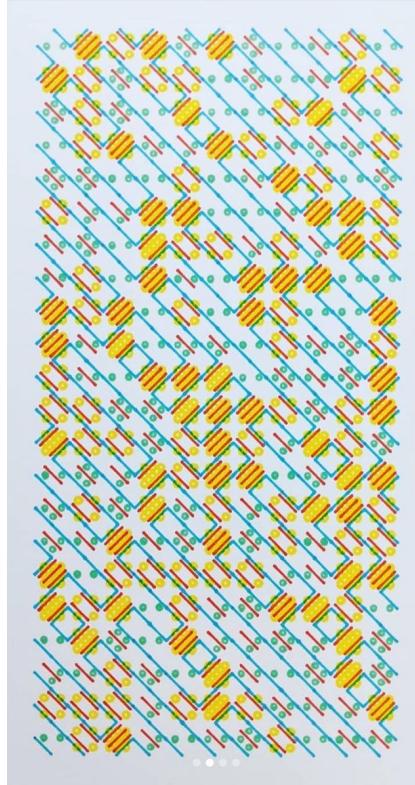
© ibis

<https://www.dailymail.co.uk/sciencetech/article-2211227/The-Picasso-robots-Ibis-Hotel-creates-artificial-arm-draws-sleep-patterns-toss-turn.html>

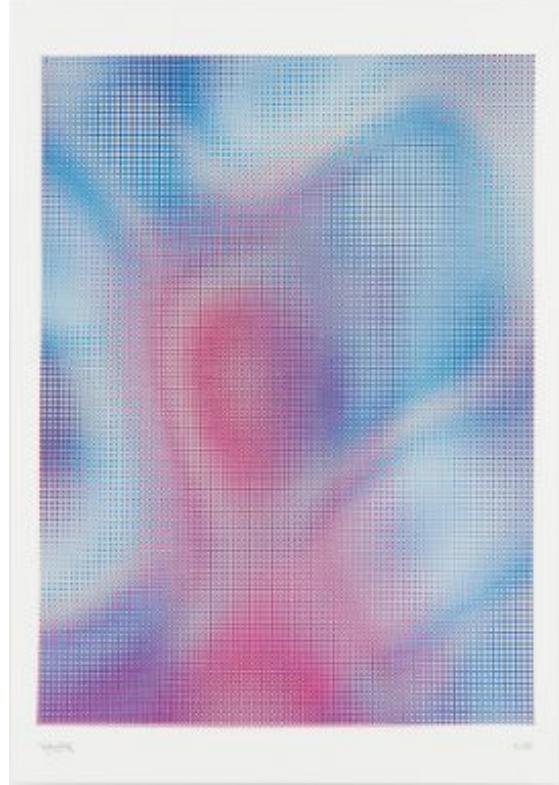
Expectations



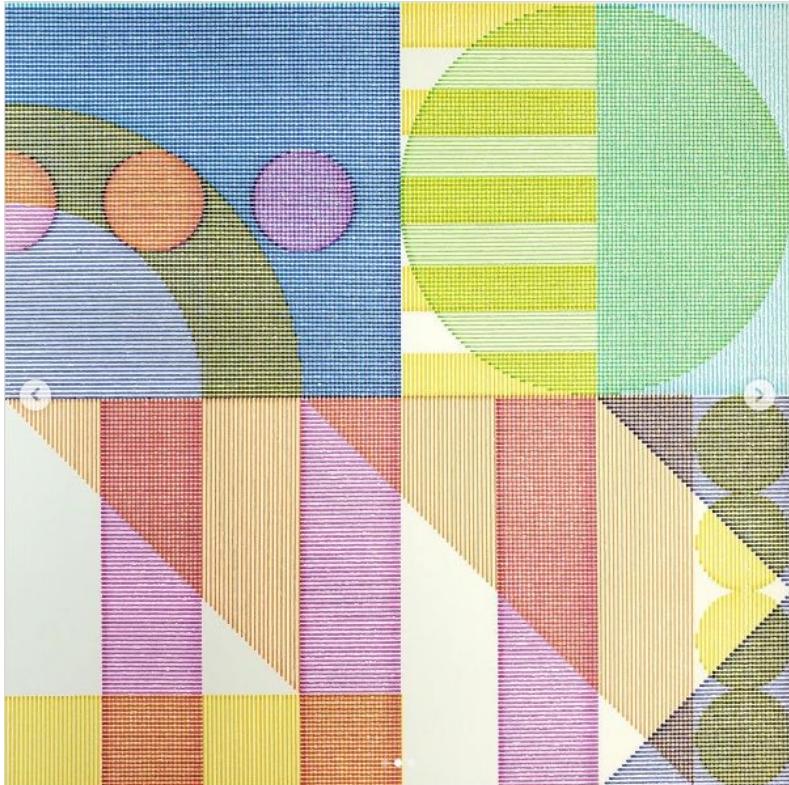
<https://www.instagram.com/p/C58fvlhruCk/>



https://www.instagram.com/p/CTkjDZoJefx/?img_index=1



<https://www.instagram.com/p/C5o0l1xrJTR/>



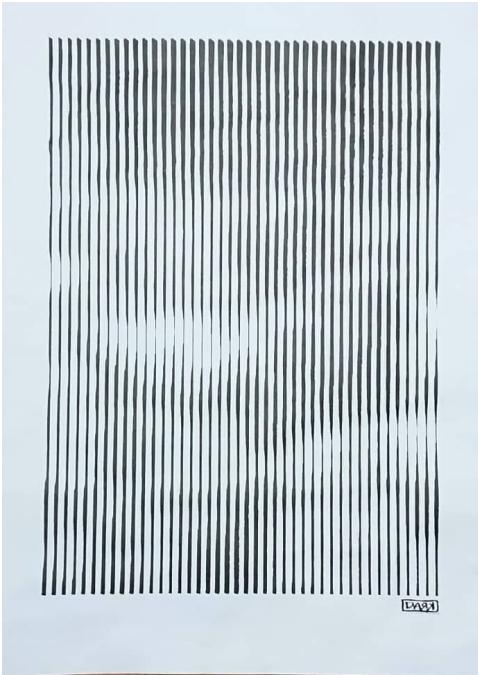
https://www.instagram.com/p/Ca5nvNIPArh/?img_index=2



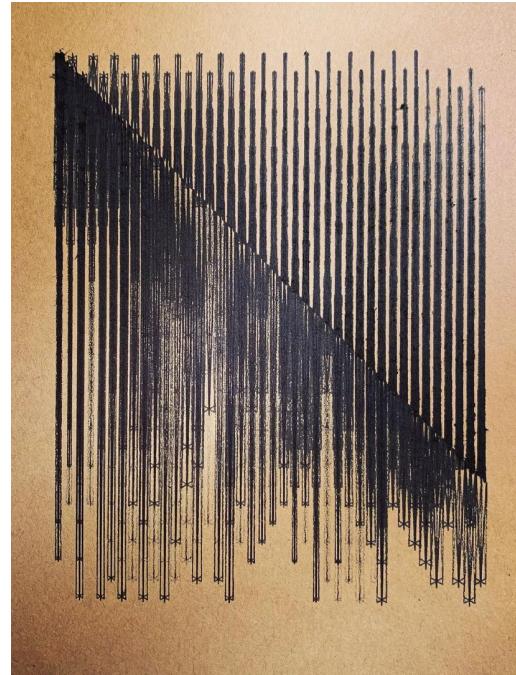
https://www.instagram.com/p/CYH_GDsPODy/?img_index=2



<https://penplotterartwork.com/blog/2023/10/11/how-to-pen-plot-on-black-paper/>



<https://penplotterartwork.com/blog/2021/10/27/weather-as-art-inspiring-pen-plot-art/#more-304>



<https://penplotterartwork.com/blog/2021/10/29/glitches-embrace-mistakes-as-part-of-the-pen-plot-process/>