

A grayscale image of a fingerprint, showing the intricate ridges and valleys. The text 'GENERATIVE' is overlaid in the center in a bold, white, sans-serif font. The numbers '2', '1', and '3' are positioned above the letters 'A', 'T', and 'I' respectively, creating a stylized 'GENERATIVE' text.

GENER²A¹T³IVE



HARDWARE TOOLS

A QUICK OVERVIEW

HARDWARE TOOLS AND DEVICES

MOSTLY DESIGNED TO BE COMBINED WITH OTHER MEANS

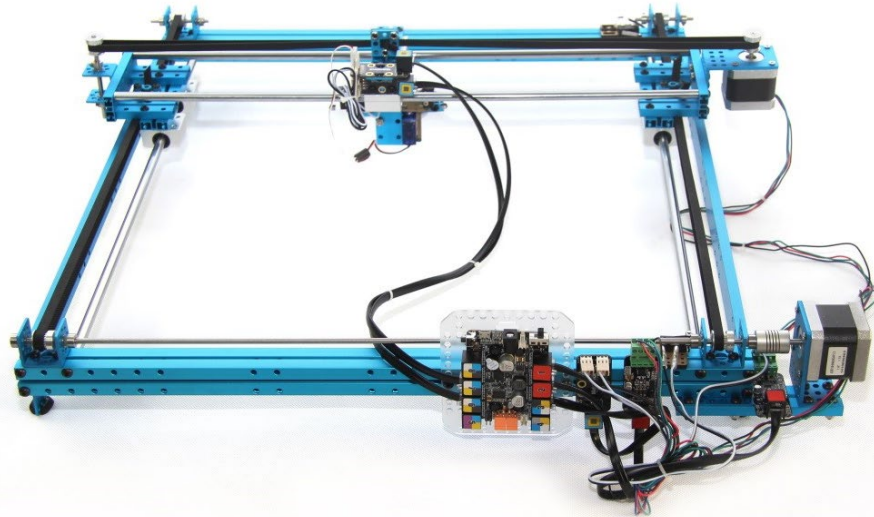
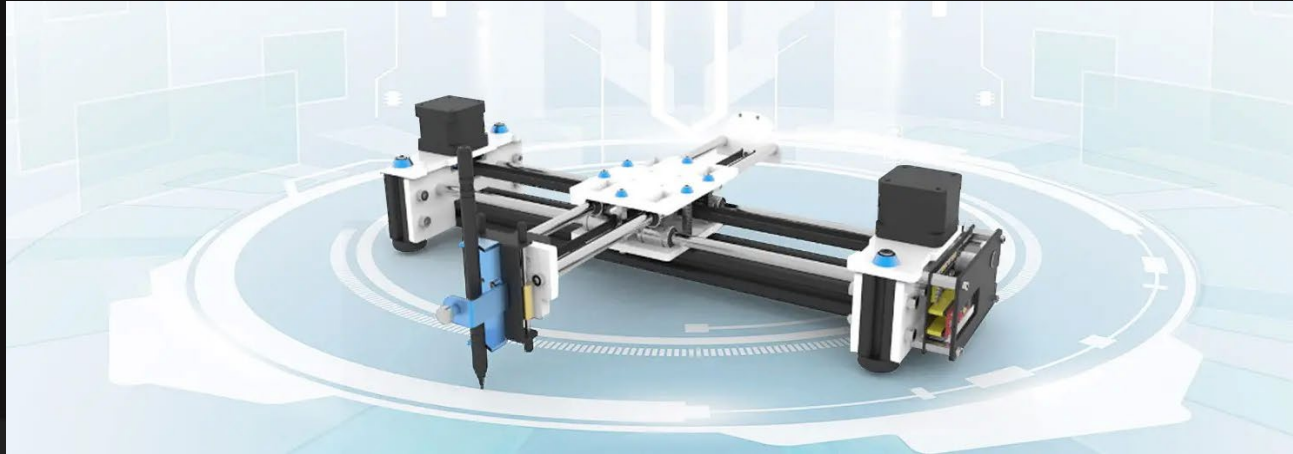
e.g. SOFTWARE AND CODING TOOLS VIA COMPUTERS

VAST PALETTE OF CATEGORIES AND MODELS

Some popular with the artists (popularity fluctuates)

- COMPACT ROBOTIC SYSTEMS
 - 3D SCANNERS
- MOTION/HAPTIC CAPTURE AND TRACKING DEVICES
 - VR HEADSETS
 - SYSTEMS ON A CHIP

COMPACT ROBOTIC SYSTEMS



COMPACT ROBOTIC SYSTEMS

2D PRINTER/PLOTTER/ENGRAVERS

3D PRINTERS

DRONES

From cheap to expensive.

Price varies with stability, precision and versatility.



AxiDraw V3

3D AND LIDAR SCANNERS

VARIOUS TECHNOLOGIES FOR 3D SCANNERS

From 100 to 10,000 USD price range,



INTERACTIVE MOTION/HAPTICS TRACKING DEVICES

INTERACTIVE MOTION/HAPTICS TRACKING DEVICES

CLOSE RANGE

ULTRALEAP MOTION (\$)

STRATOS INSPIRE (\$\$\$)

MID-RANGE

INTEL REALSENSE FAMILY,

MS AZURE KINECT (EX KINECT)

Both top models around 400 USD.



Nathan Selikoff - 2013 - Technological Telekinesis (full video @ OSS)

VR HEADSETS

HTC VIVE

MAGIC LEAP

MS HOLOLENS 2

OCULUS VR

**Can be used for conventional interactivity
and for generative systems.**

SINGLE-BOARD COMPUTERS (SBC) / SYSTEMS ON A CHIP (SoC)

**RASPBERRY PI, BANANA PI, RASCAL, PANDABOARD ES, IGEPV2,
BEAGLEBOARD, HIFIVE UNLEASHED, TINKERFORGE, ETC.**

Autonomous computers with I/O devices.

Different standards and sizes (form factors).

Good for setting up compact networked installations.

TRADE-OFFS

MAIN ARE BETWEEN PRICE, PRECISION AND ROBUSTNESS/RELIABILITY

MOST DEVICES ARE WELL DOCUMENTED,

SO LEARNING-FOR-APPLICATION CURVES USUALLY NOT STEEP

SOME REQUIRE/BENEFIT FROM ADDITIONAL (BASIC) KNOWLEDGE,

e.g. ELECTRONICS, MACHINE ENGINEERING AND MATERIALS,

CHEMISTRY, ETC.

LEARNING RESOURCES

PLENTY ONLINE RESOURCES

FOR BOTH COMMERCIAL AND OPEN SOURCE DEVICES,

IF POPULAR

LR ALSO AVAILABLE THROUGH IMPLEMENTATIONS OF

POPULAR CODING TOOLS:

FROM PYTHON (ROBOTICS AND AI),

THROUGH MAX/MSP/JITTER, VVV AND PURE DATA TO TOUCHDESIGNER

LEARNING APPROACHES

**DIRECT HANDS ON EXPERIENCE,
TESTING AND LOOKING AT SHOWCASES**

**BEST OPPORTUNITIES
IN WELL EQUIPPED ACADEMIC ENVIRONMENTS
SUCH AS ADM AND NTU**

A grayscale image of a fingerprint pattern, showing the characteristic ridges and valleys. The pattern is centered and fills the entire frame.

THANK YOU!