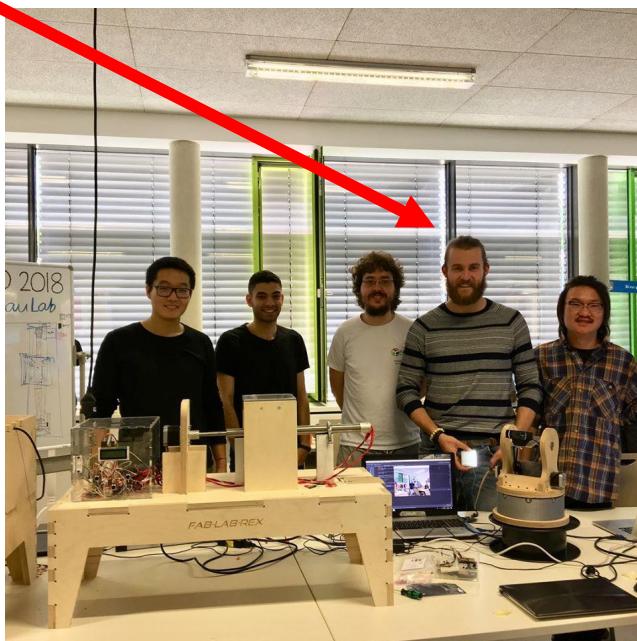
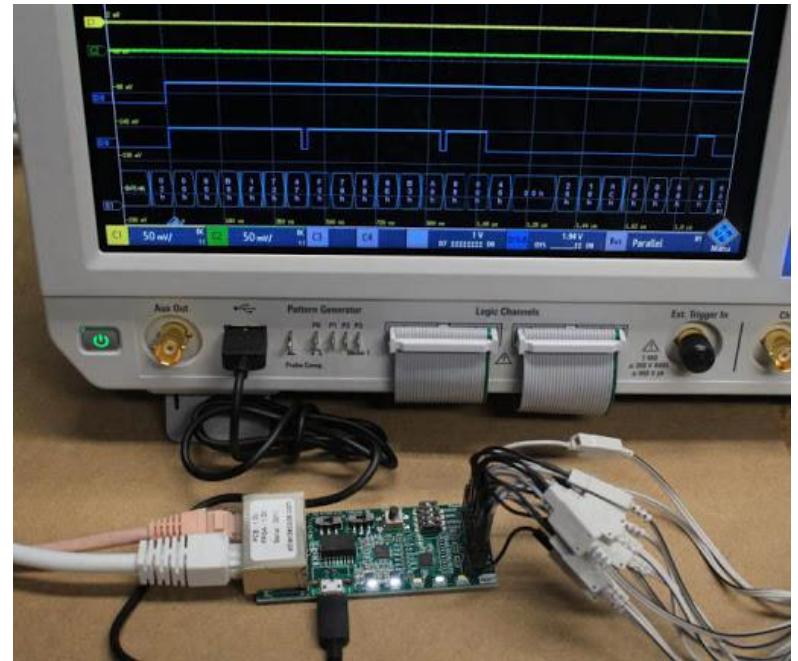
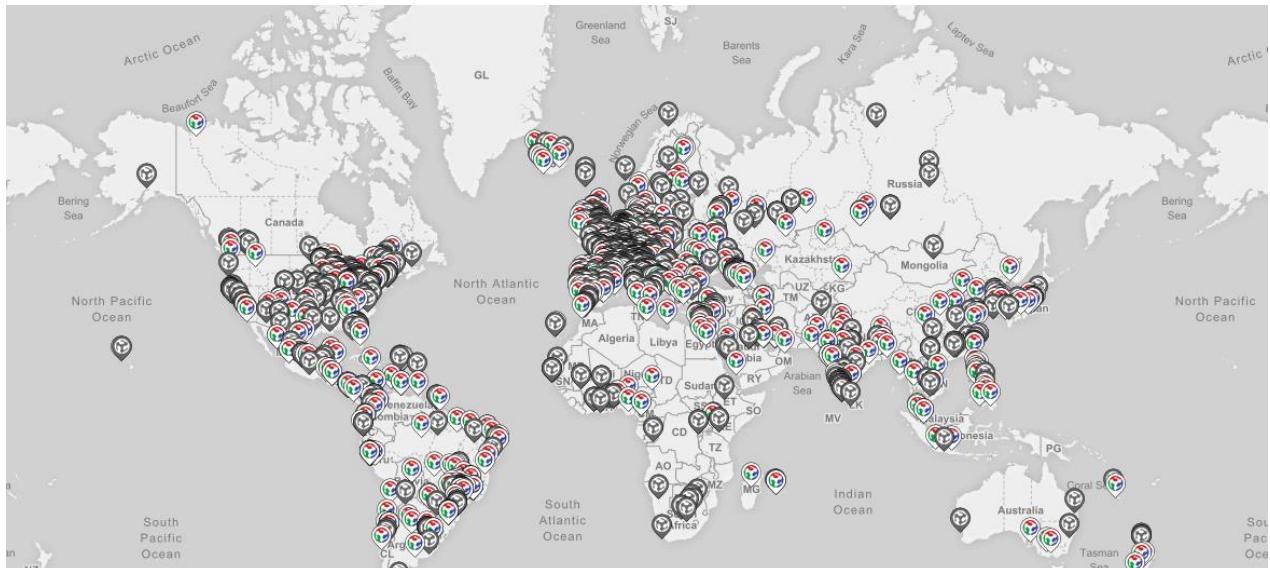


Hello_friend



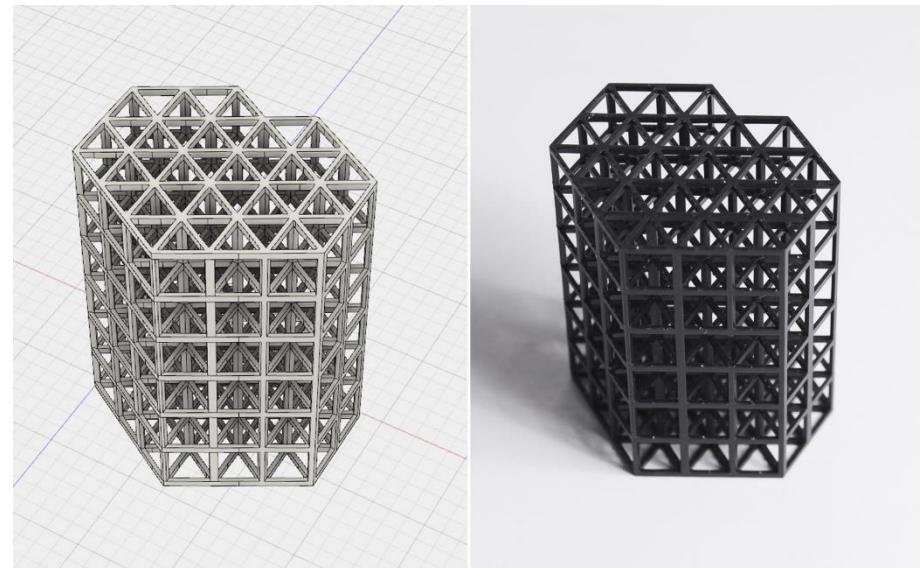
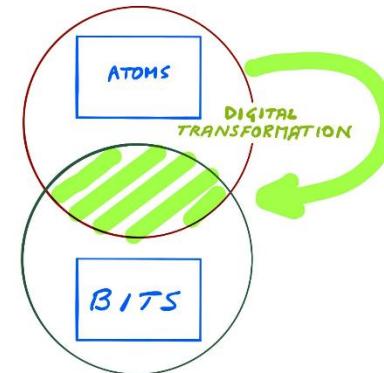
Fabrication Laboratory

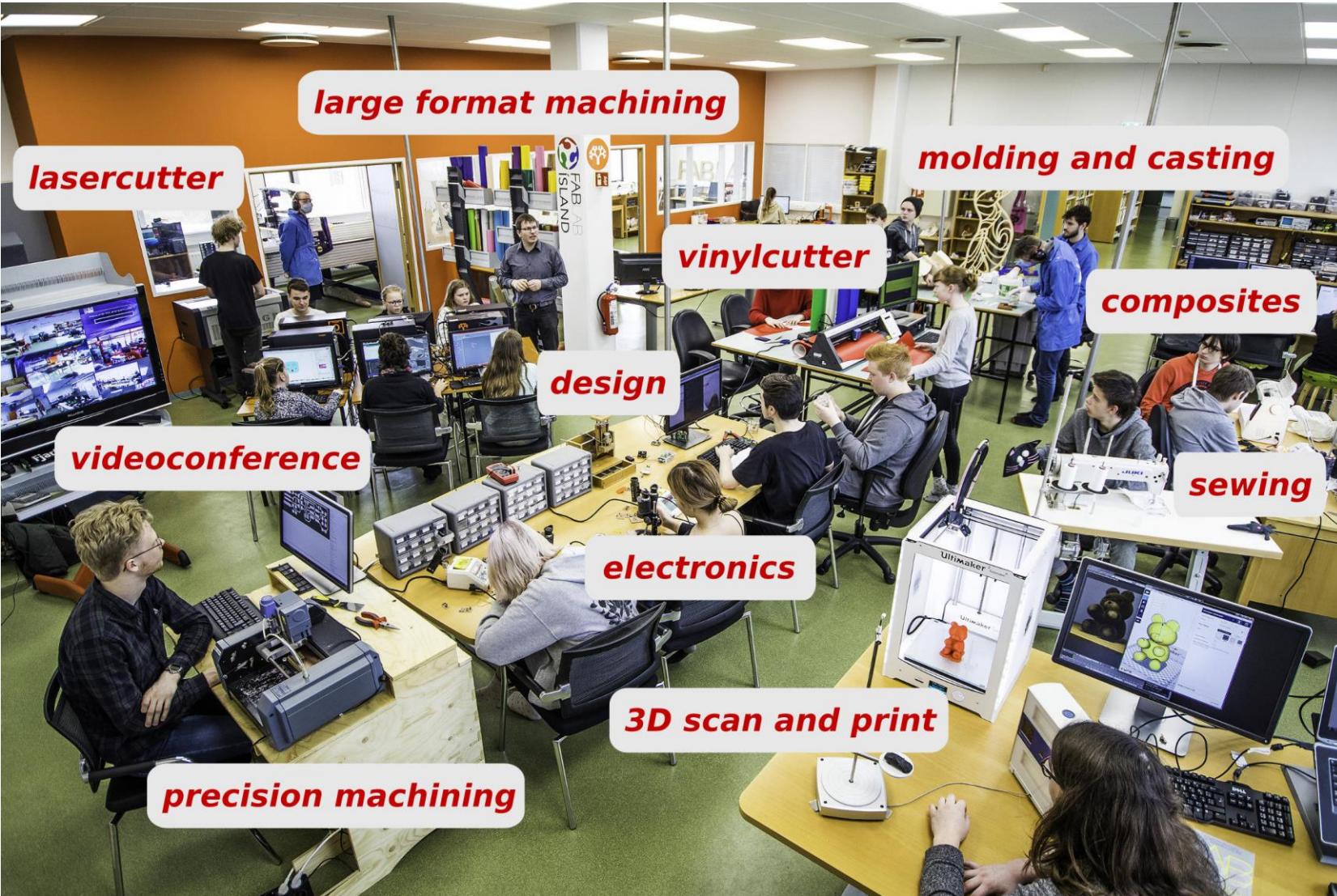


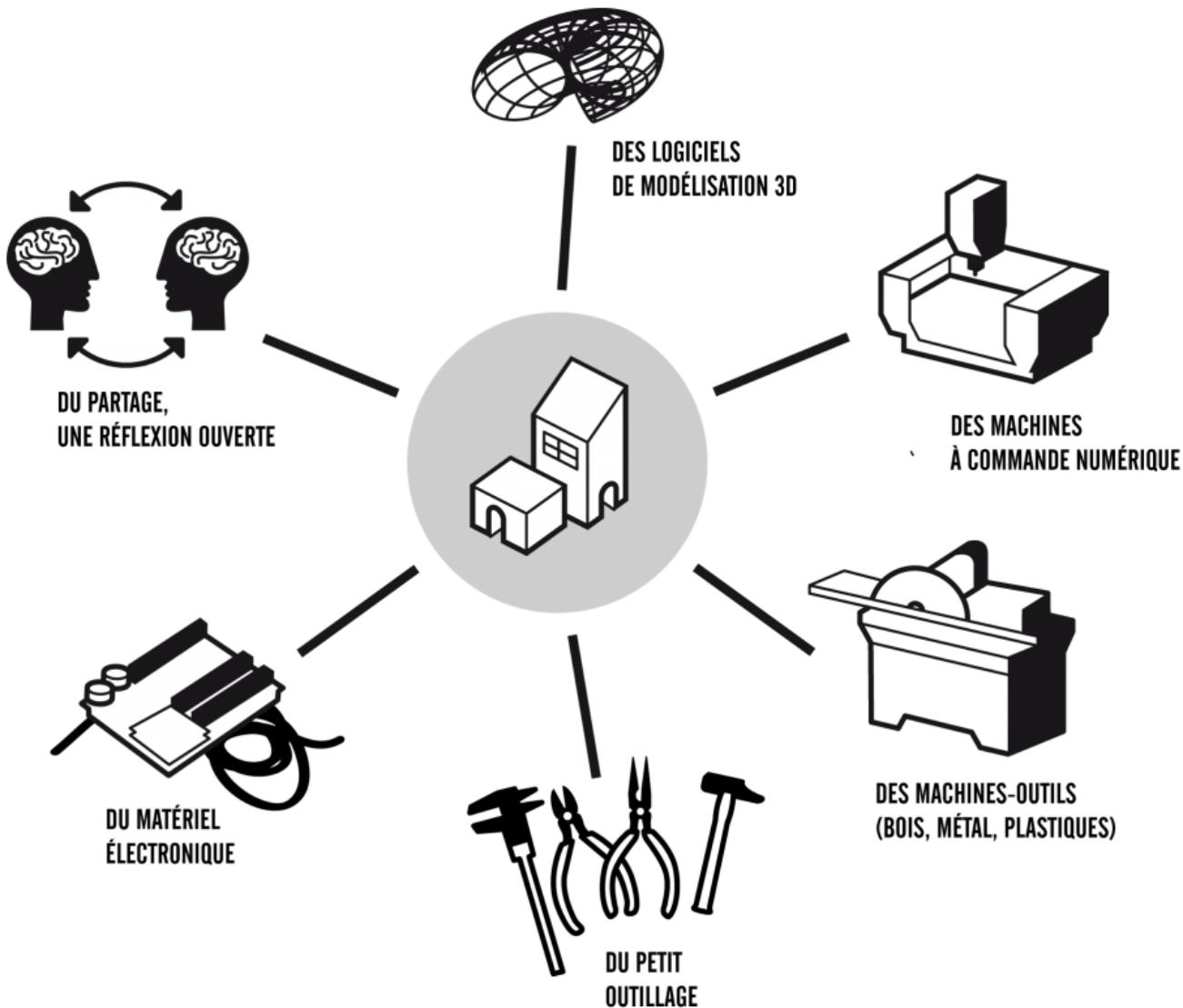
How to make (almost) anything

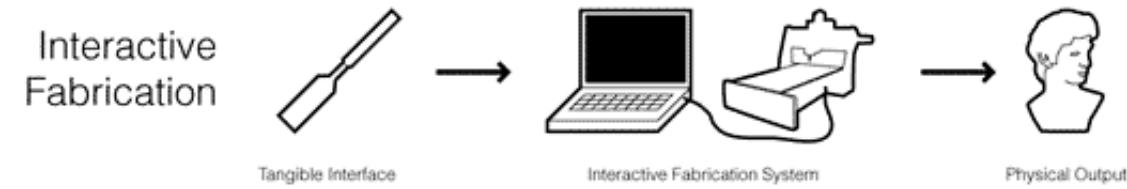
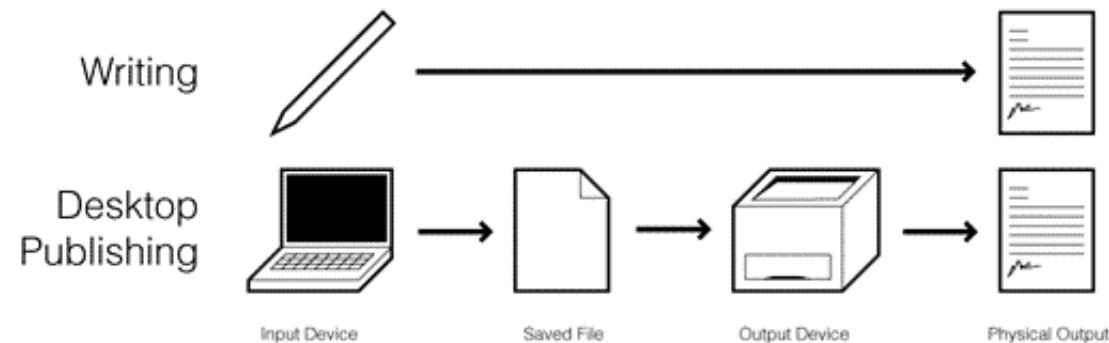
ECONOMY
OF SCARCITY

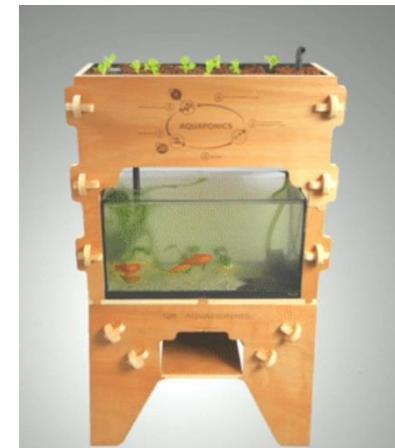
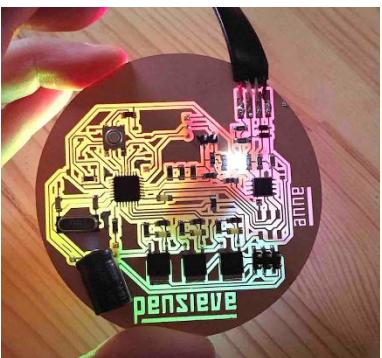
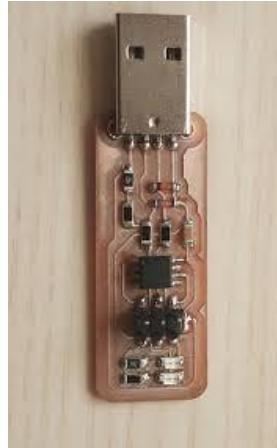
ECONOMY
OF ABUNDANCE















Laser cutter



(Small) CNC
Milling machine



Vinyl cutter



3D Scanner



3D
printing



Digital
sewing /
embroidery

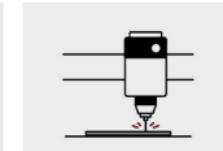


(Big) CNC
Milling machine

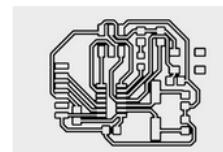


Electronics
(custom PCBs,
Arduino)

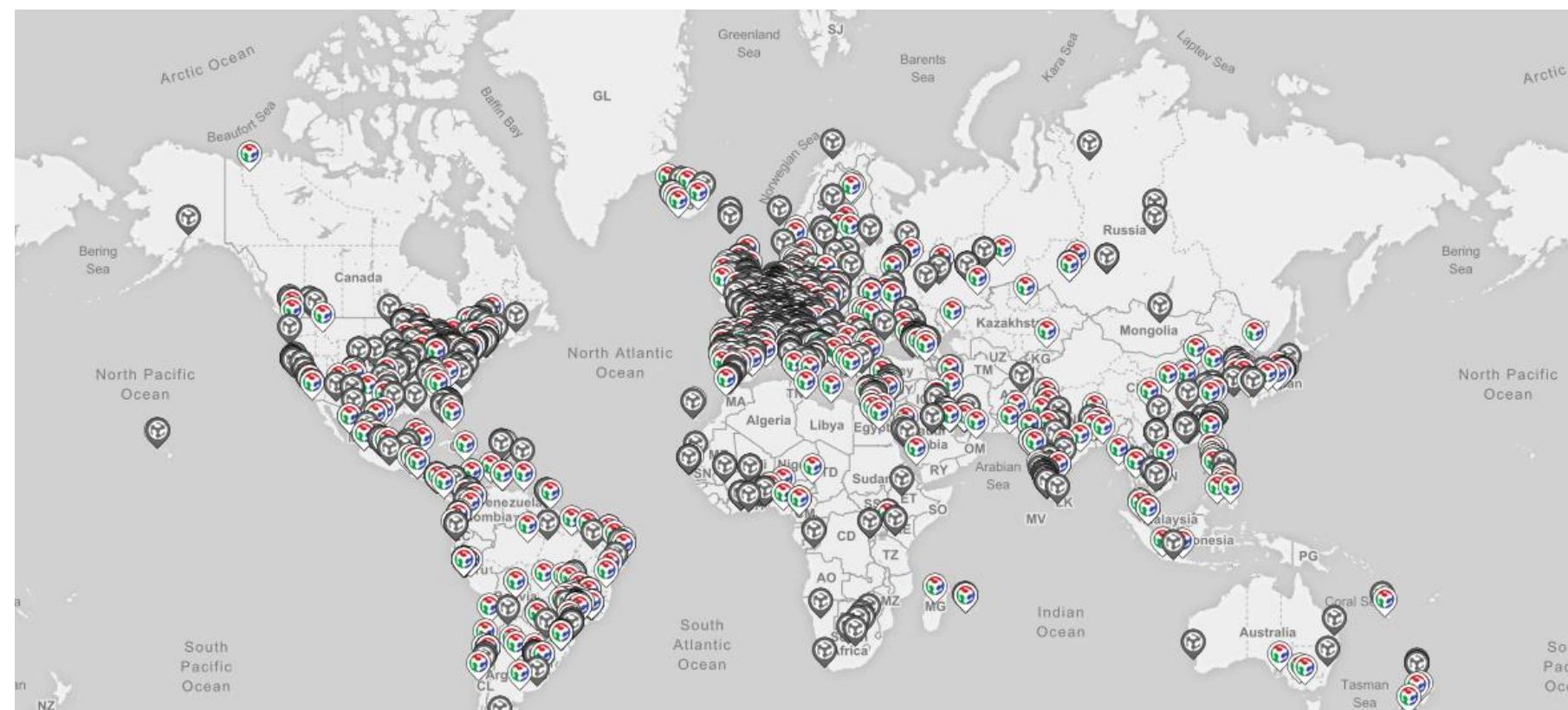
Fab Academy



Machine
Design



FINAL
PROJECT





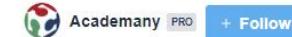
The Fab Academy 2020 Schedule

Jan 29: principles and practices ([video](#), [project management](#) ([video](#), [review](#))
Feb 03 recitation: version control ([video](#))
Feb 05: computer-aided design ([video](#), [review](#))
Feb 12: computer-controlled cutting ([video](#), [review](#))
Feb 17 recitation: design thinking ([video](#))
Feb 19: electronics production ([video](#), [review](#))
Feb 26: 3D scanning and printing ([video](#), [review](#))
Mar 02 recitation: (dis)ability ([video](#))
Mar 04: electronics design ([video](#), [review](#))
Mar 11: computer-controlled machining ([video](#), [review](#))
Mar 16 recitation: debugging ([video](#))
Mar 18: embedded programming ([video](#), [review](#))
Mar 25: input devices ([video](#), [review](#))
Mar 30 recitation: fab ecosystem ([video](#))
Apr 01: applications and implications ([video](#), [review](#))
Apr 08: break
Apr 15: output devices ([video](#), [review](#))
Apr 20 recitation: FABx ([video](#))
Apr 22: interface and application programming ([video](#), [review](#))
Apr 29: invention, intellectual property, and income ([video](#))
May 04 recitation: education
May 06: networking and communications
May 13: molding and casting
May 18 recitation: machines
May 20: wildcard week
May 27: mechanical design, machine design
Jun 01 recitation: startups
Jun 03: project development
TBA: project presentations
TBA: project presentations
TBA: project presentations
TBA: project presentations

The screenshot shows a video conference with Neil Gershenfeld in the foreground and a grid of smaller video feeds of participants in the background. To the right, there is a collage of images related to the 'Fab Boombox' project. The top right image shows the assembled boombox with two speakers and a handle. Below it are images of the internal circuit board, the main board, and a close-up of the PCB. Text on the right side describes the project's components: a laser-cut wood case, a 9V battery for power, three PCBs, a main board with Atmega328, a level shifter, SD card, and VS 1011E-S chips, and capacitive touch buttons.

20200401 applications and implications

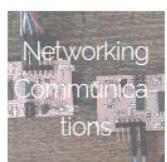
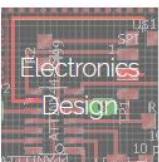
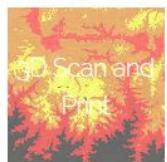
1 month ago | More

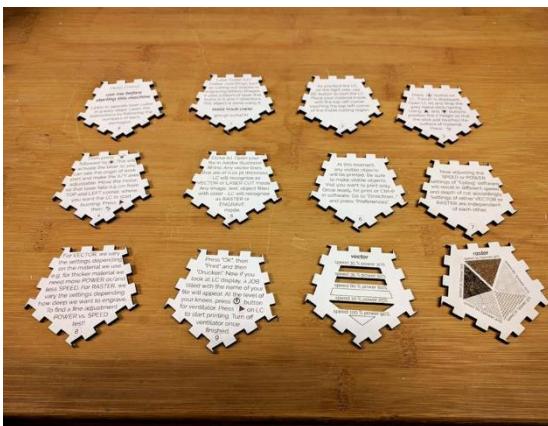
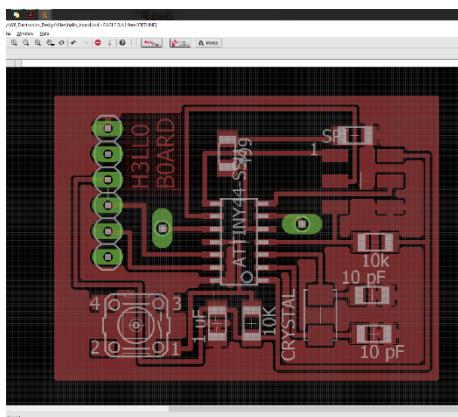
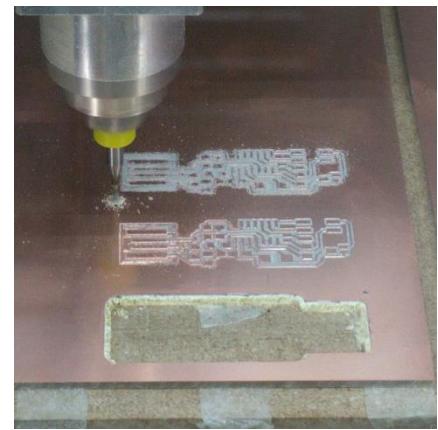
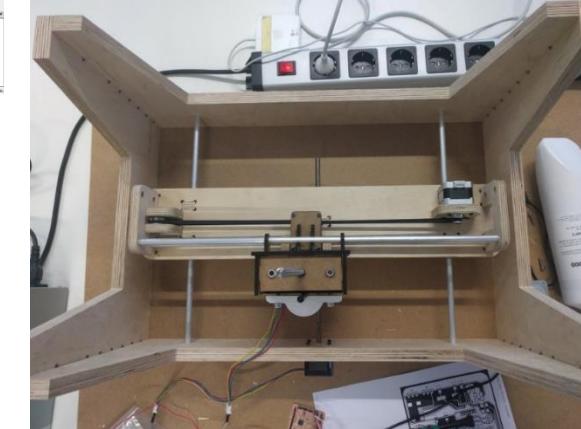
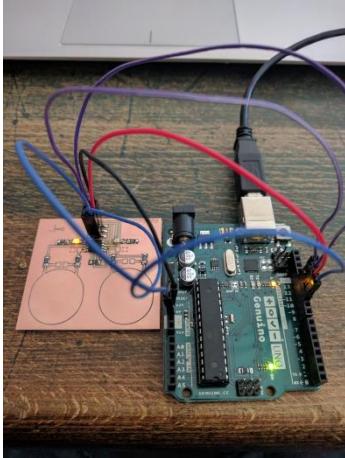
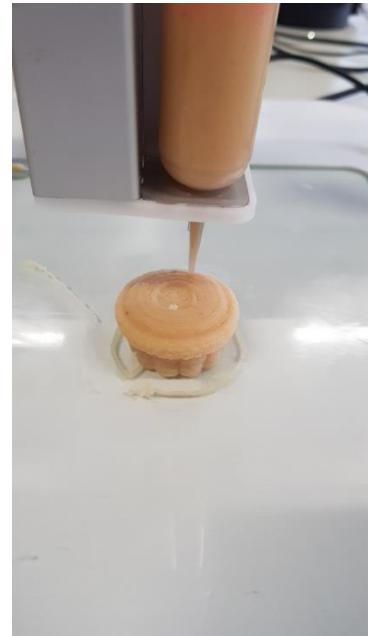
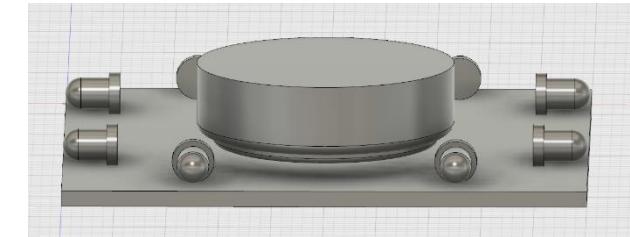
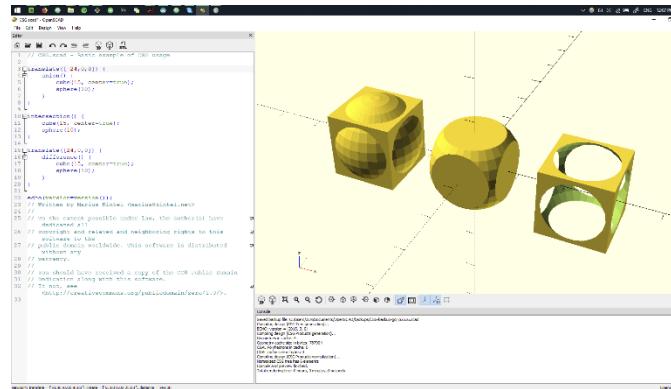
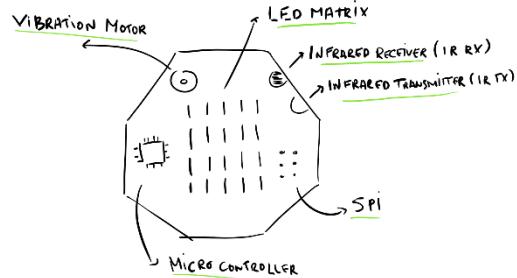


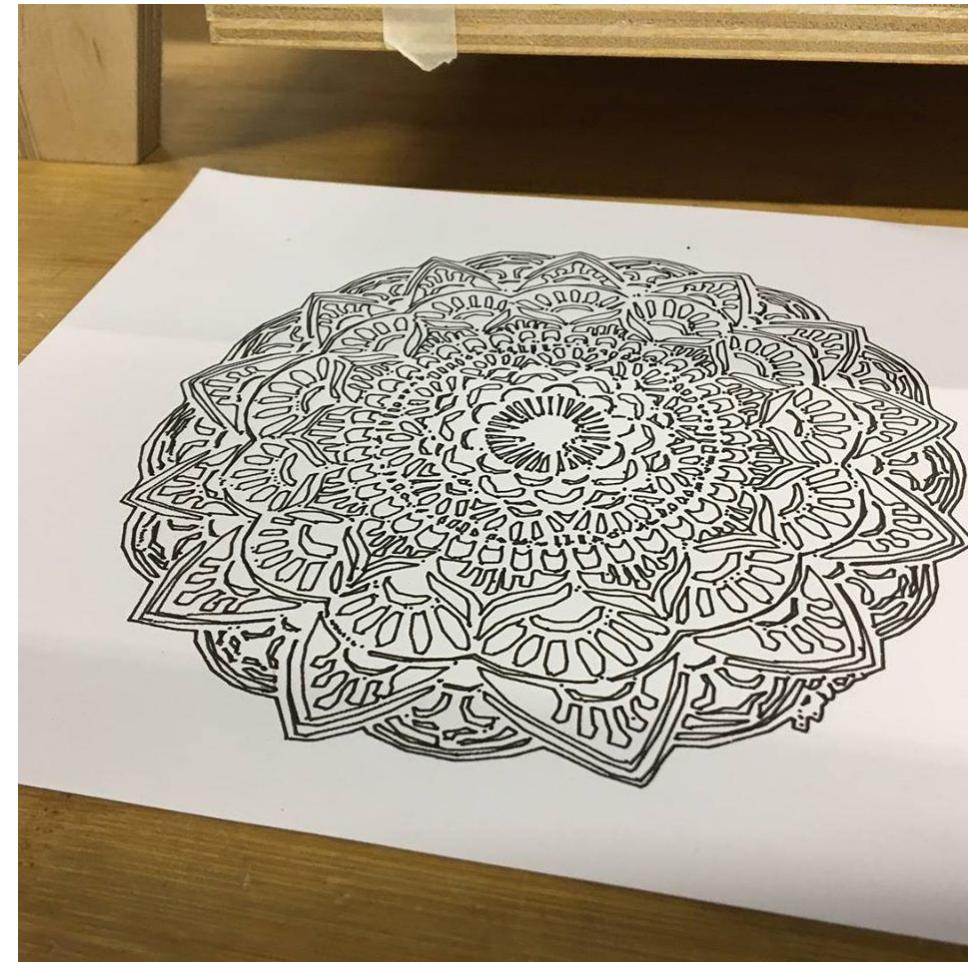
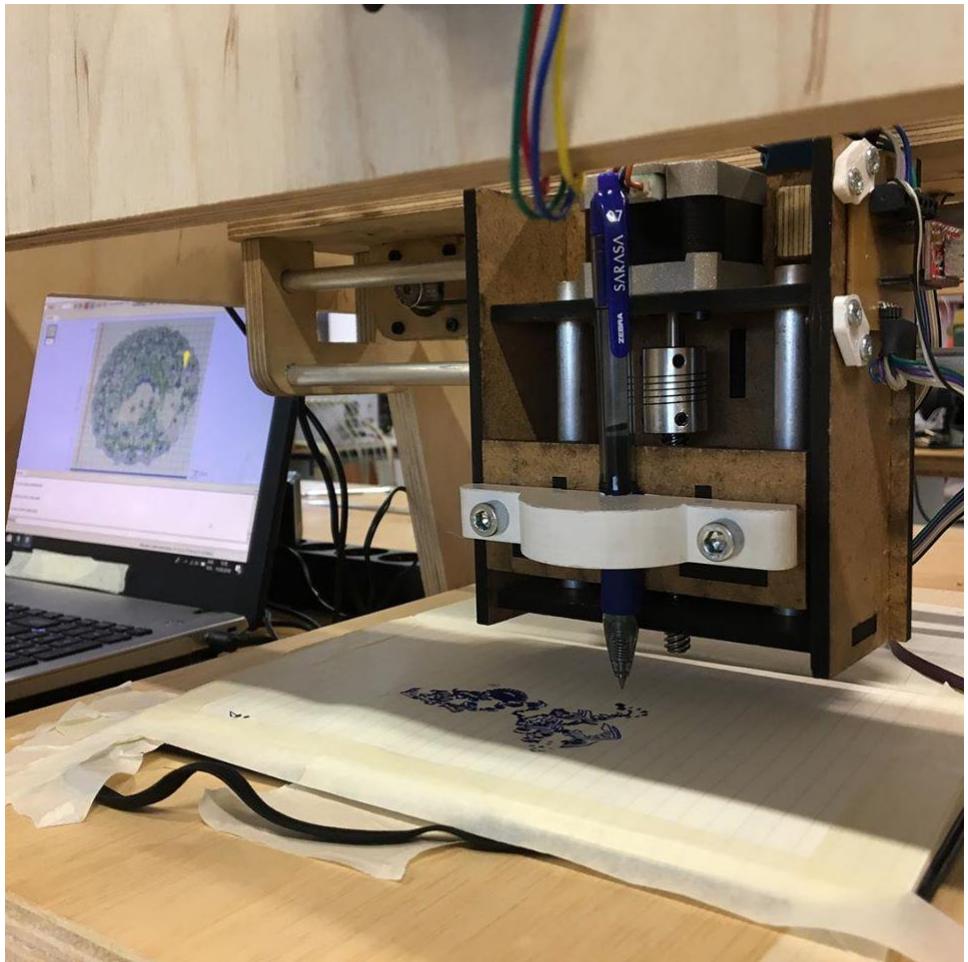
More from Academany

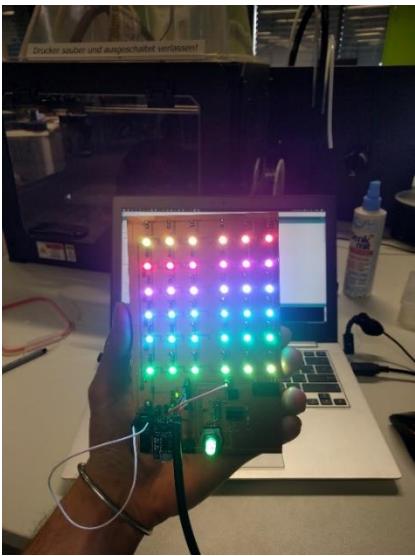
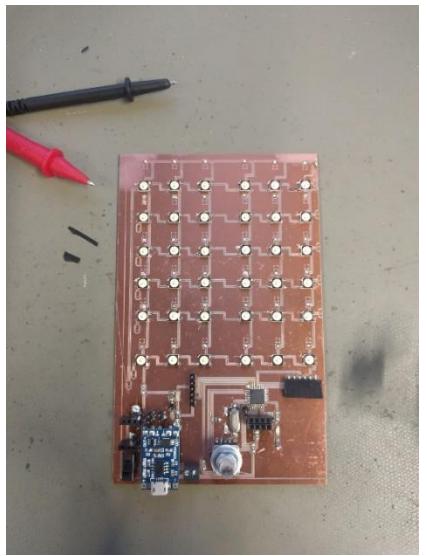
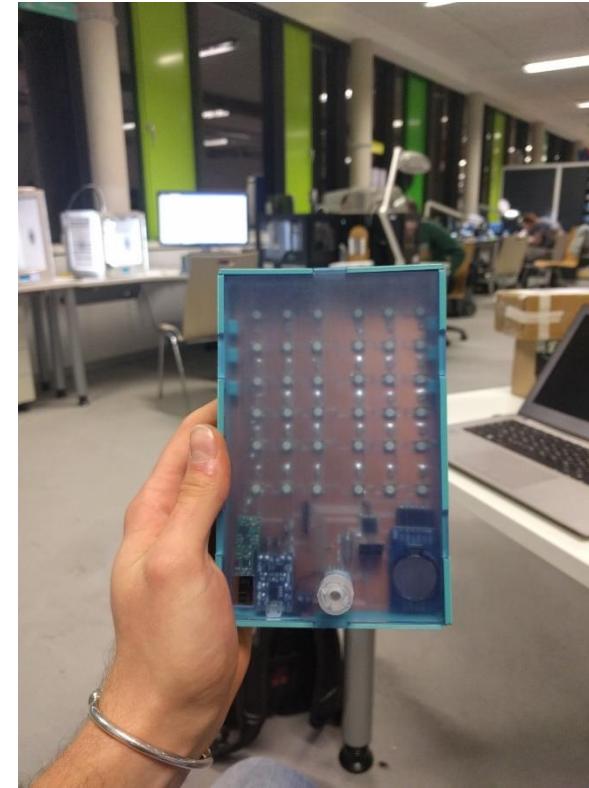
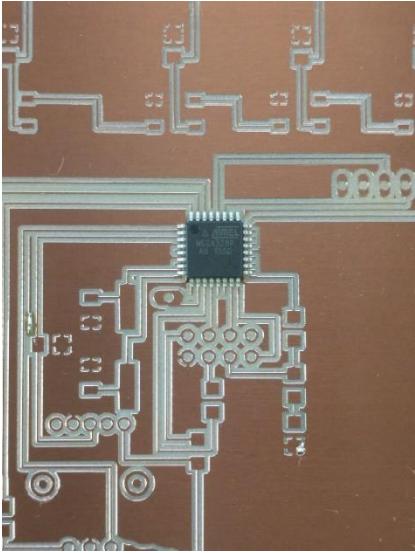
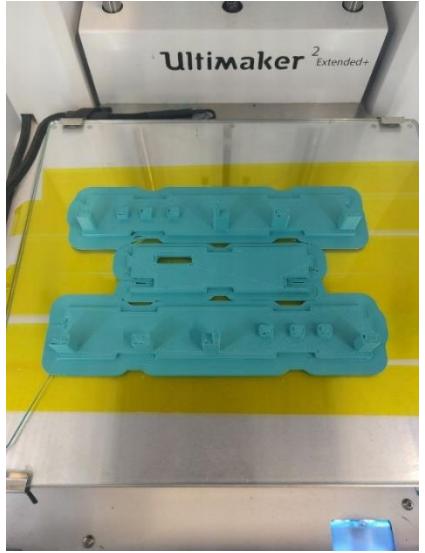
Autoplay next video

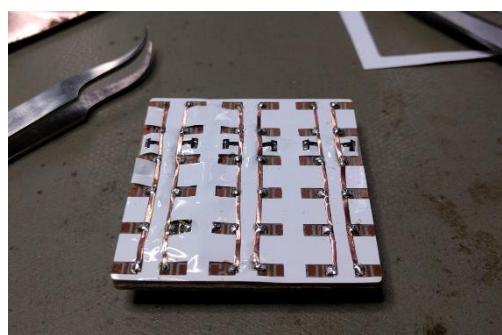
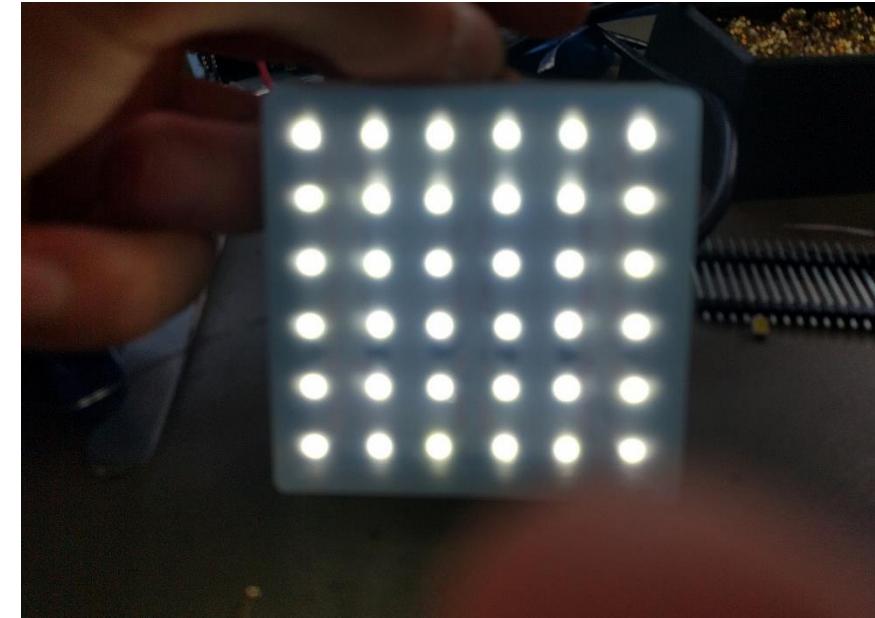
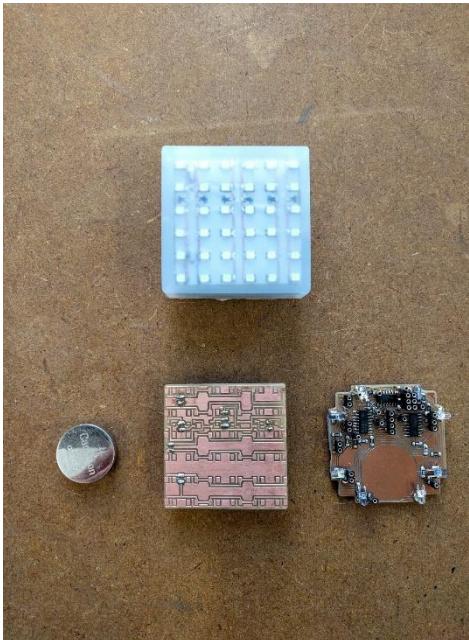
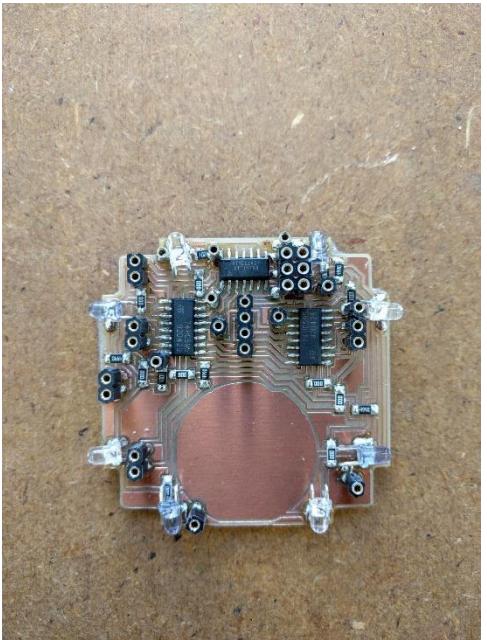
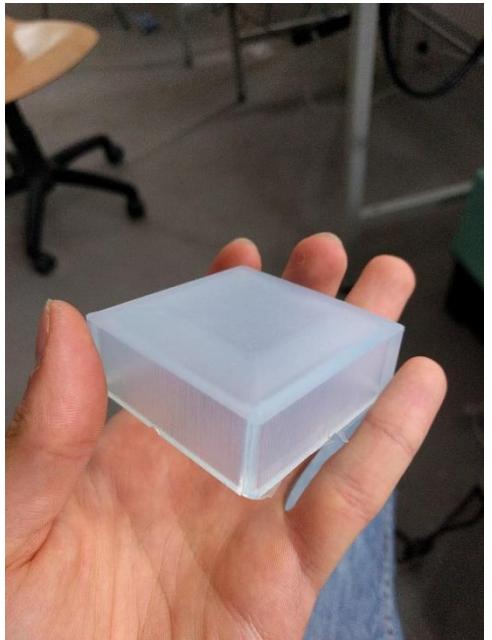
20200401 applic...
Academany



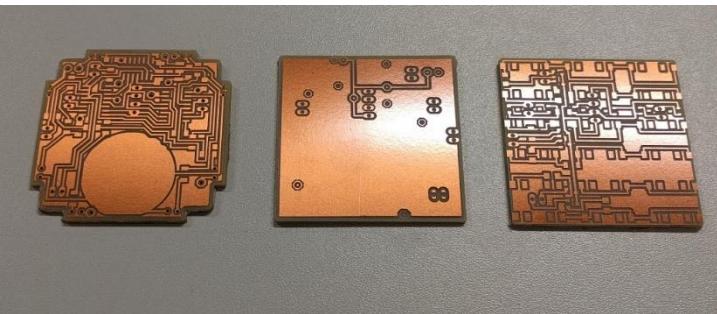
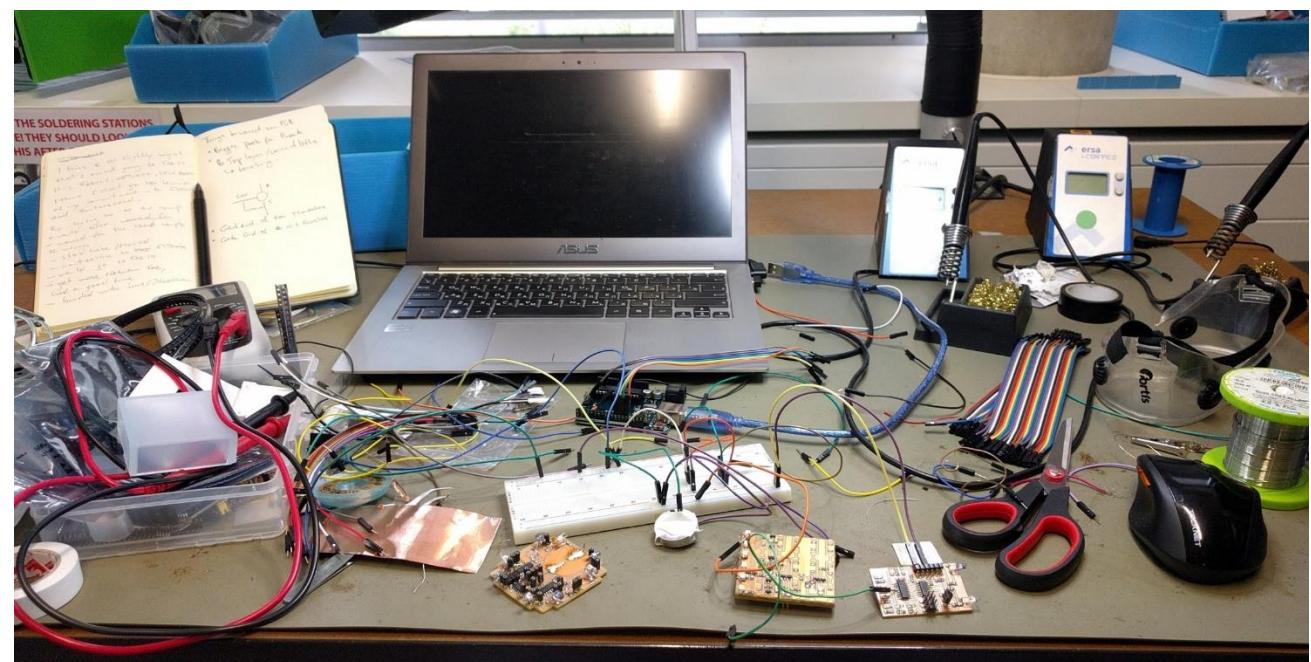




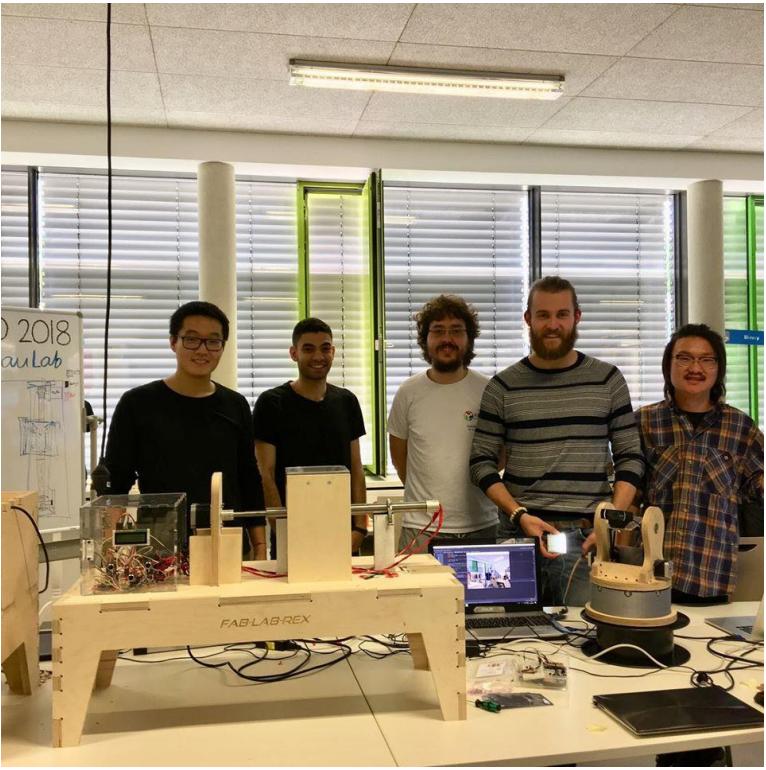


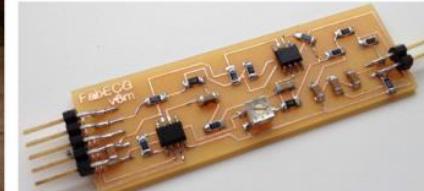
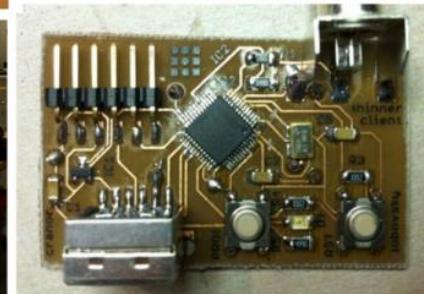


1



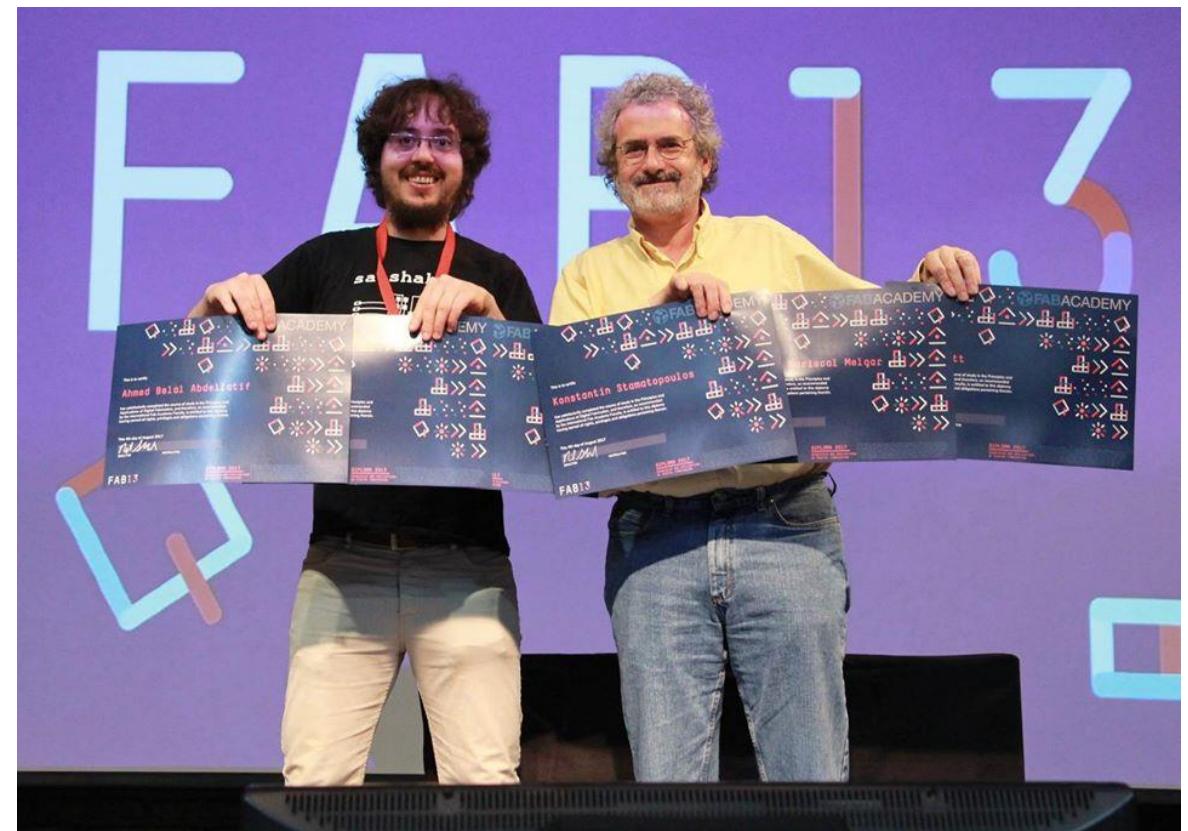
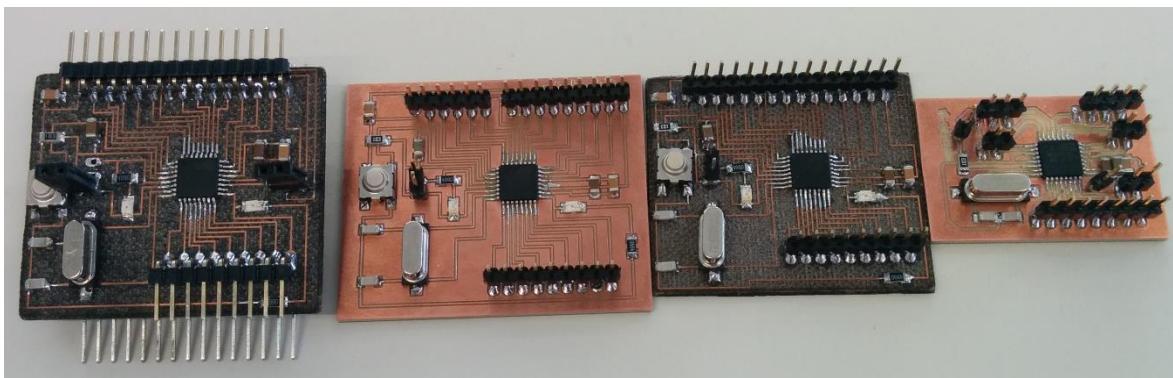
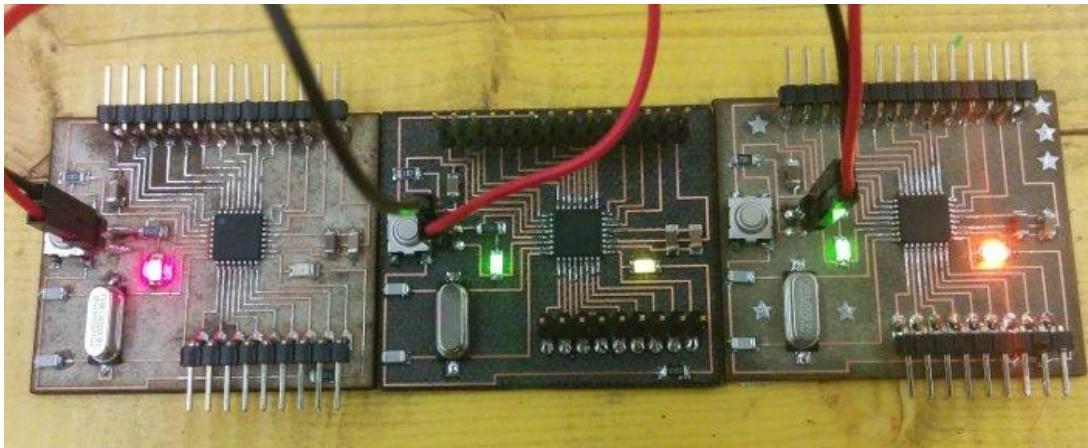
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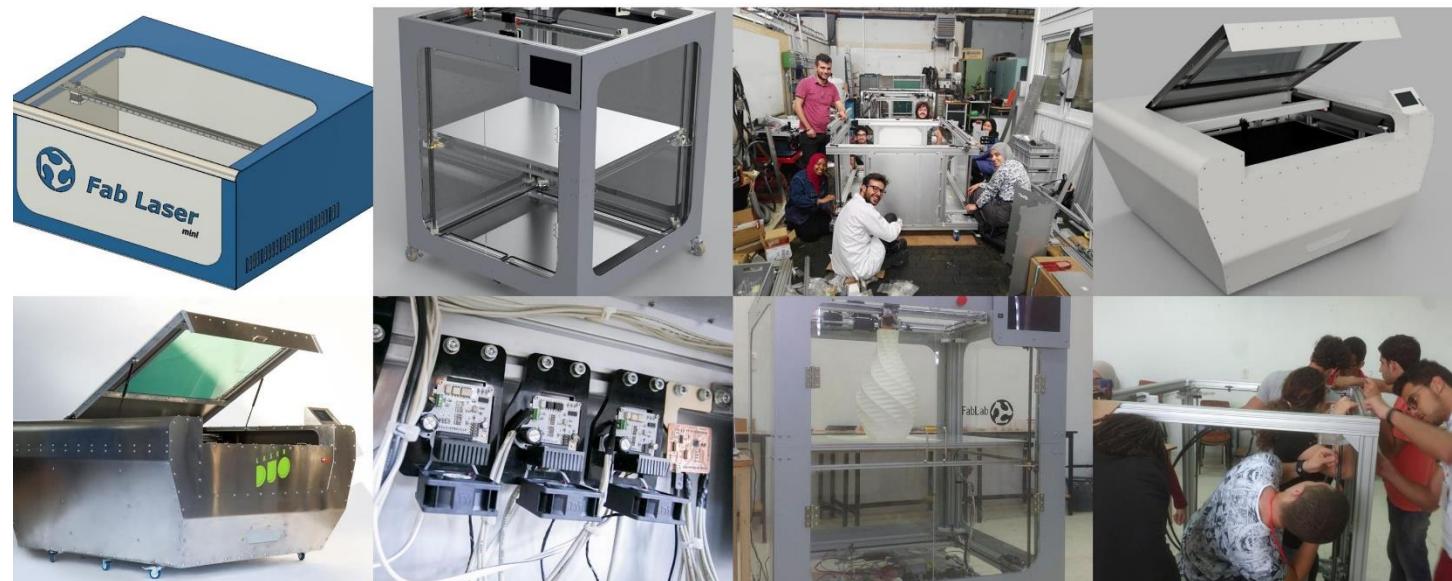


Prototiparea Digitală

satshakit



A Google search results page for the query "sethakit". The top navigation bar includes "All", "Images", "Maps", "Videos", "News", "More", "Settings", and "Tools". Below the search bar, there are several circular filters with labels: "github", "mini flight controller", "midi", "arduino ide", "ttl 232r", "readme md", "arduino uno", "fab lab", "fablab", "ftdi cable", "projects", "open source", "board", "multifw", and "programmer". The main content area displays a grid of search results, each consisting of a thumbnail image, a title, and a link. The results include various images of printed circuit boards (PCBs), assembly instructions, and usage examples related to the "sethakit" project.





Google shields and masks fab lab

Q: All Images News Videos Maps More Settings Tools

siquor protective equipment uta fablab face shield kohel yeshiva face mask 3d printing fablab nallees healthcare workers patrick henry ppe suncoast science 3d printer jim hart tennessee covid

Fab Lab makes protective face ... martinlabbulletin.com 3D prints coronavirus face-shields ... goiot.com FabLab Bochol Is Producing Face Shields ... addtormagazine.com UTA FabLab Rallies to Make Face ... librairies.utah.edu UTA Jewish day school turns its art ... timesherald.com UT 3D printing face shield parts for ... wwt.tv COVID-19 Face Mask ... srmagazine.com COVID-19: Watson School teams make ... binghamton.edu donating face shields for ... gress-chman.com University donates face shields, masks ... coakrathnews.com Fab Lab El Paso, Local Makers use 3D ... alpacanerdtop.com

Charlotta Latin students raise more ... web.com UMass Amherst grads student and ... weip.com ESF LIMA Fab Lab makes face shields ... teamteamremo.com.ph CSUB making face shields for health ... bawarfield.com Face Masks With Your ... islandadvantages.com Fab Lab makes protective face ... martinlabbulletin.com Local man leads efforts to ... observer-reporter.com Fab Lab 3D prints face mask ... wwt.com North Carolina university faculty ... fox29.com University makerspaces and 3D printers ... unadv.edu Pennsylvania Yeshiva High School ... hamodia.com

ESSO Making a Thousand Face Shields ... inom.org Fab lab face shield - Rev. revealatokmountainair.com Home (en) - Protective Face Shields fablabutb.githab.io Calling All Makers With 3D Printers ... forbes.com DTI London on Twitter: @DTIPhiippines ... twitter.com BSU-Fablab provides Face shields for ... qia.gov.ph Home (en) - Protective Face Shields fablab-utb.githab.io Industry creating masks for frontline ... vgnradio.com Gateway's Fab Lab making PPE, health ... ianoshanews.com Fab Lab, local mom making protective ... islandadvantages.com coronavirus face shields ... dazzen.com

Masks meet science + Albuquerque ... abqjournal.com University inmates mass manufacture ... plantinglearning.com Parata Collages protot... paratafctzz.com protective gear for coronavirus crisis ... chicoer.com Artists and device-makers In Aspen ... aspersmas.com From Design to Mass 3D printing of ... blog.pnusprinters.org Engineers Made a DIY Face Shields ... wired.com Fab Lab, local mom making protective ... islandadvantages.com protective gear for coronavirus crisis ... chicoer.com Suncoast Science Center COVID-19 Face ... suncoastscience.org Hundreds Of 3D-printed ... kum.org COVID-19 Idea Fab Lab Face Shields and... mid.org

Face Mask & Shield Requests COVID-19 PROJECT Suncoast Science Center Face Mask ... suncoastscience.org Save Lives w 3D Printed Face Shields Phillip Alt Koenig with SFA Roseman SFA Koenig

3D printed face shields ... inventables.com manufacturer of disposable face shields ... harsimranjeet.sciabdu mobilizes its maskspace to 3D print ... harsimranjeet.sciabdu 3D-Printed Face Shields, Sugar Alcohol ... univeristyofgreek.gr university lab makes face shields ... gmu.edu Suncoast Science Center COVID-19 ... armagazine.com Rapid response to COVID-19 puts the ... pennmeds.openpubs Home (en) - Protective Face Shields fablabutb.githab.io Home Robot to Produce Much-needed ... gizmo.com

Brown Production

Productos 3D para la salud ... 3dprintmed.com

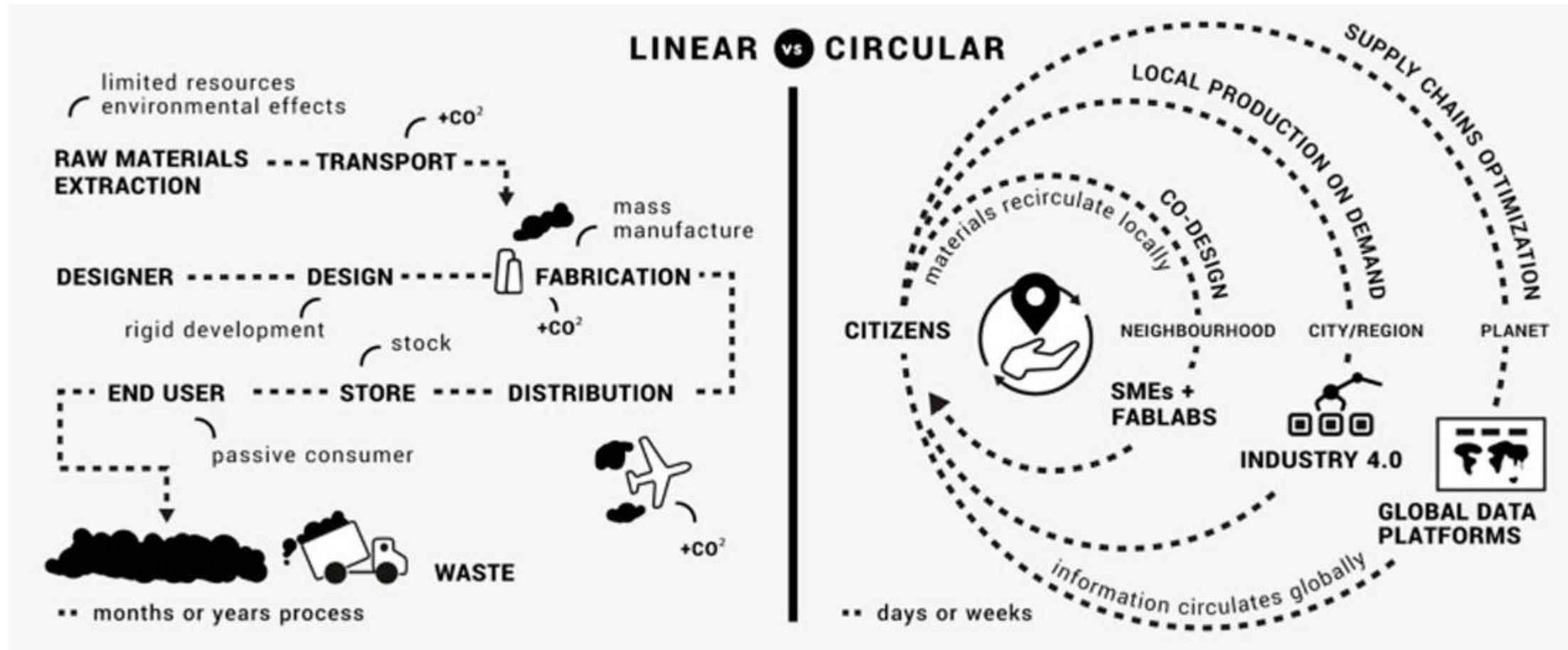
3D Printed Face Shields ... 3dprintmed.com

www.SFA Roseman in action in the Clean Room

EMPOWERED BY North Valley COMMUNITY FOUNDATION

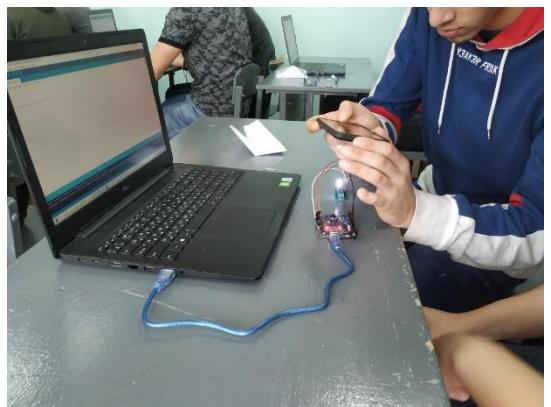
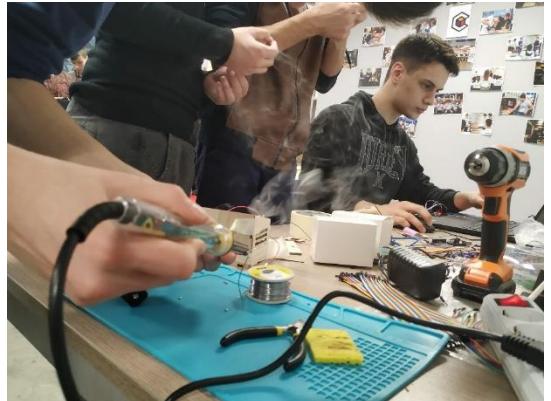
SUNCOAST SCIENCE CENTER Faulhaber Fab Lab

www.SFA Roseman in action in the Clean Room





Youth Maker Club

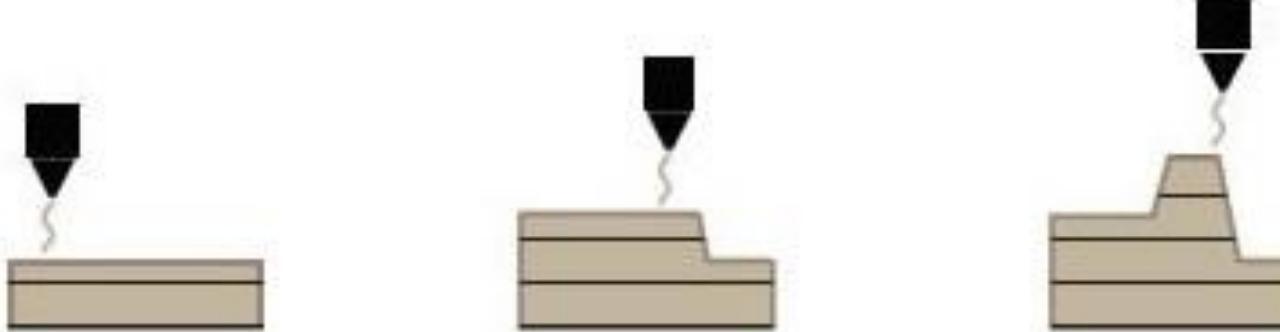


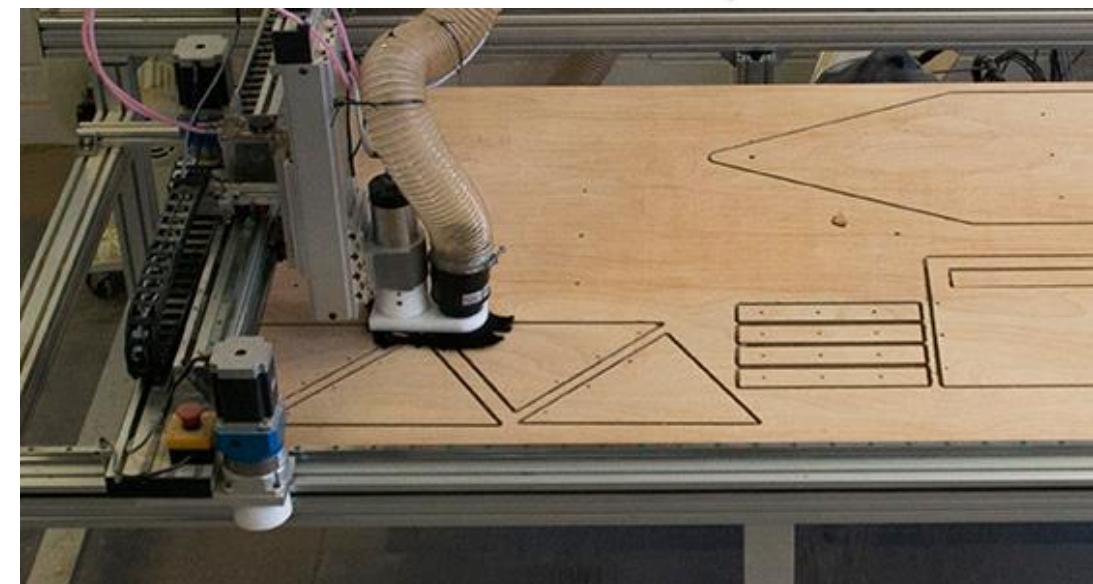
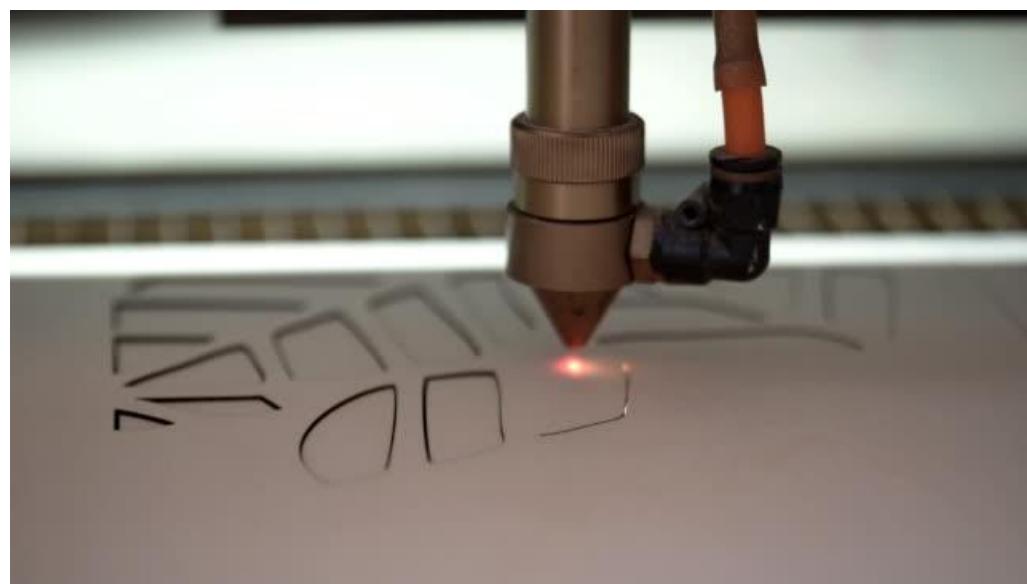
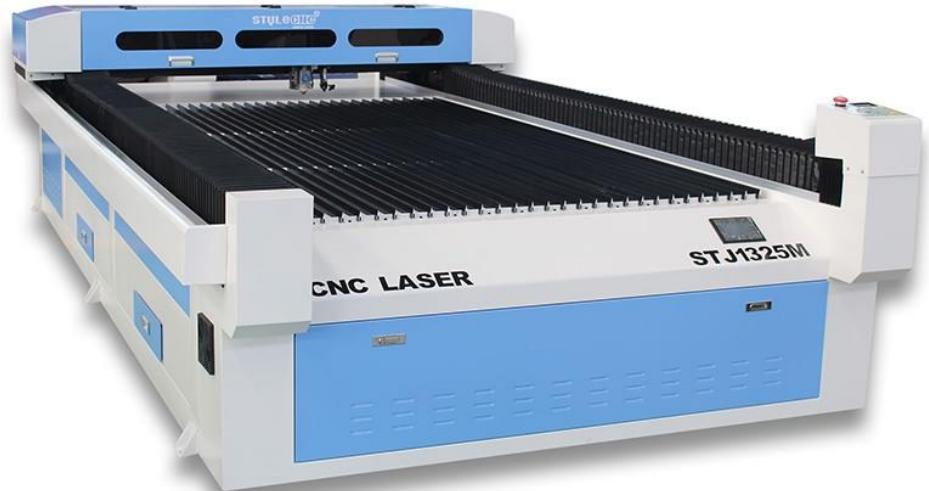
Laser & CNC

Subtractive

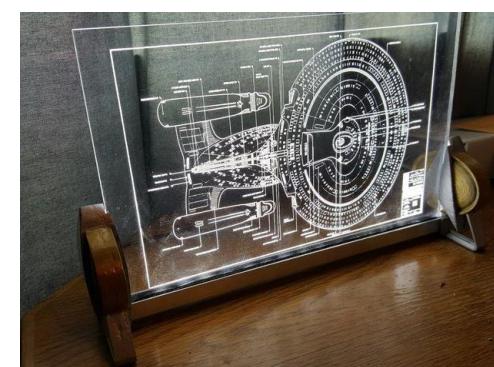
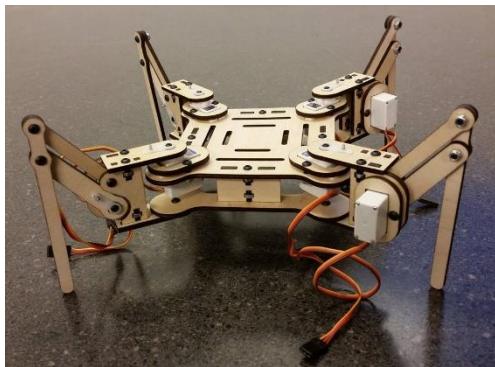
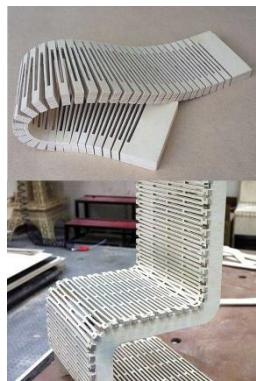
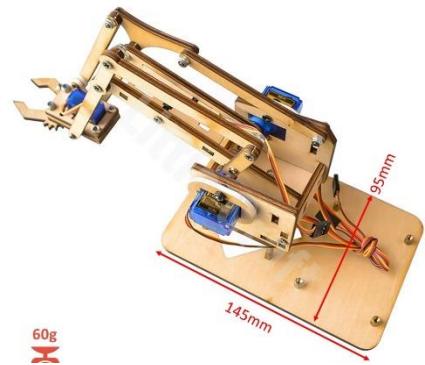


Additive





Noi învățăm să facem obiecte -- De la proiectare la produs final



Cum dezvoltăm un produs?

1. Idee – sarcina ta

2. Proiectare

CAD

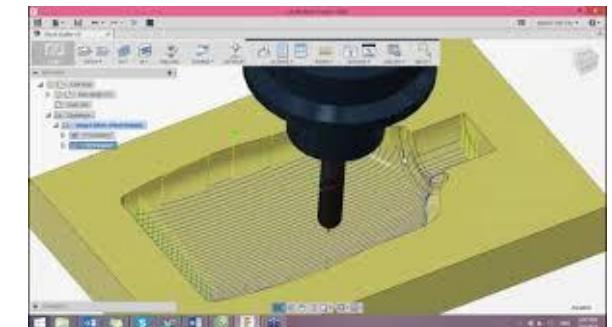
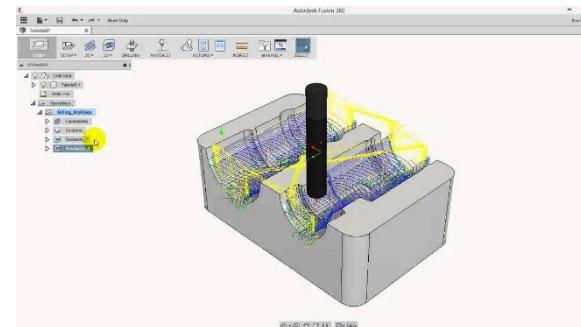
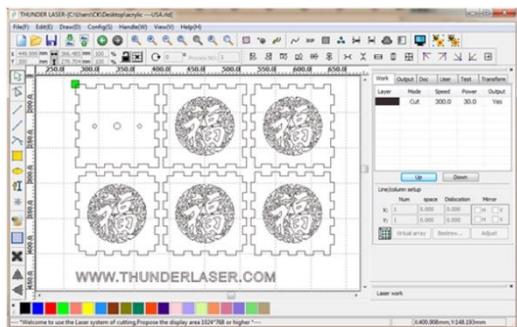


3. Pregătire fișiere - .dxf

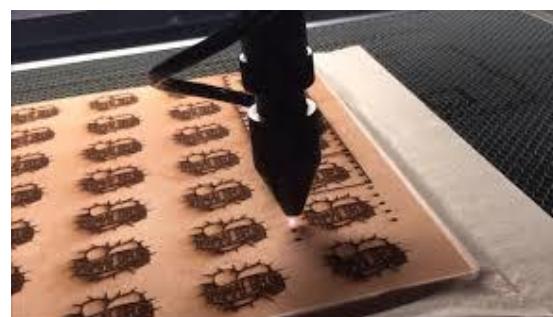
4. Procesare

CAM

Fișiere .rd, .nc

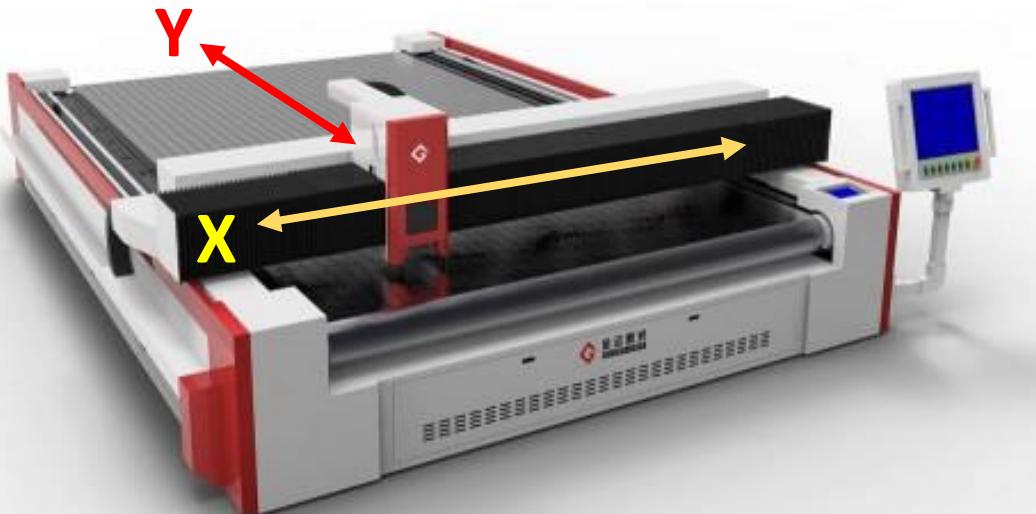


5. Prelucrare

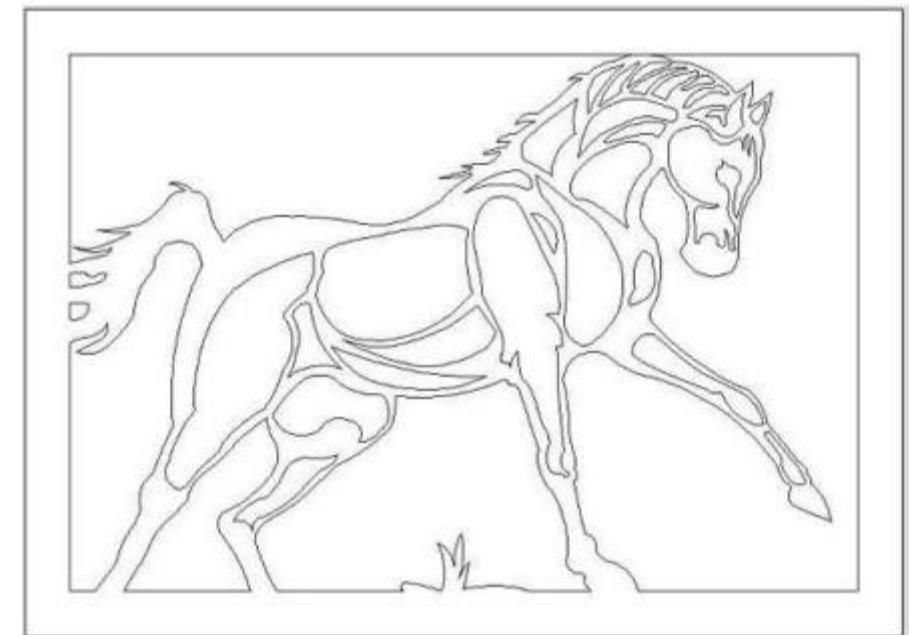


Începem cu laserul

Laserul operează în 2 dimensiuni – 2D



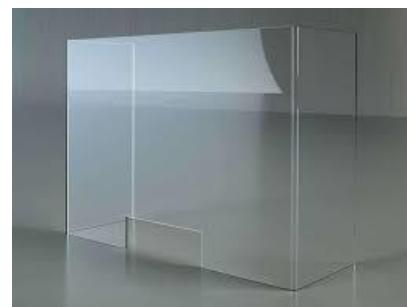
Pregătim o imagine 2D



Placaj < 10 mm



Sticlă organică



Carton



Piele



Ce lucrări putem face?

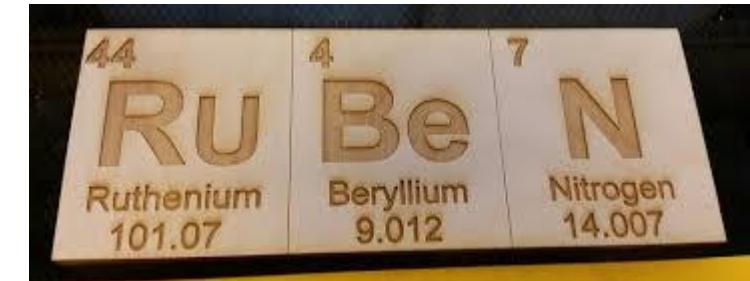
1. Tăiere



2. Gravare



3. Trasare



!!! Acst lucru este determinat cu ajutorul regimurilor – Viteza de mișcare (mm/s) și Puterea laserului (%)

Academia Fab Chisinau

18:30 – 20:30

Sesiunea	Data	Tema
1	16. Nov	Motivație - posibilități și principii Fab Lab
2	18. Nov	Modelare, materiale, procesul de substractie și tăiere pe laser.
3	20. Nov	Procesul de substractie.Tăiere, gravare și trasare pe laser.
Weekend		Conceptualizarea proiectului individual.
4	23. Nov	Descompunerea și modelarea proiectelor. Conexiuni între părți.
5	25. Nov	Lucru pe proiecte. Testare și exersarea materialelor.
6	27. Nov	Machete a proiectelor. Prototipul folosind faneră.
Weekend		Tăierea pe Laser conform orarului.
7	30. Nov	Introducere în CNC.
8	2. Dec	Pregătirea și simularea modulului CAM.
9	4. Dec	Operațiuni de tăiere pe CNC.
Weekend		Tăierea pe CNC și Laser conform orarului.
10	7. Dec	Challenge: Make something big
11	9. Dec	Combinarea tehniciilor de CNC și Laser
12	11. Dec	Pregătirea materialelor finale pentru proiect și execuție.
Weekend		Tăierea pe CNC și Laser conform orarului.
13	14. Dec	Lucru pe proiecte Laser & CNC
14	16. Dec	Lucru pe proiecte Laser & CNC
15	18. Dec	Prezentarea proiectelor finale.

Așteptări:

Project Final

/scop

Practică

/just do it

Documentare

/notează

Reciproc

/comunitate

Exercises

/deadline

Experiment

/trial & error

Hard work

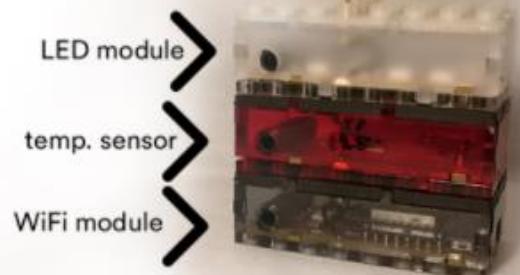
/extra hours

Flexible

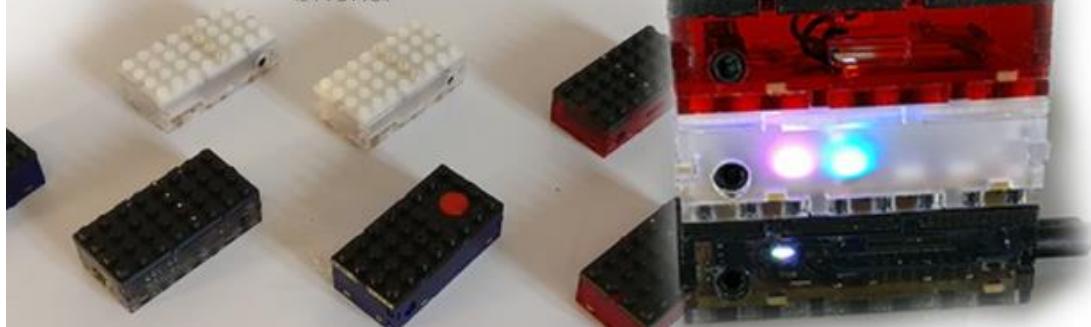
/adapt to needs

This modular IoT kit allows users to assemble their own IoT device or sensor kit that is internet enabled without prior technical knowledge.

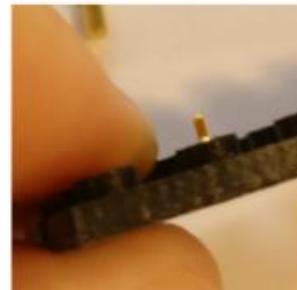
Each brick has a different function, combine them in any configuration to make an IoT device.



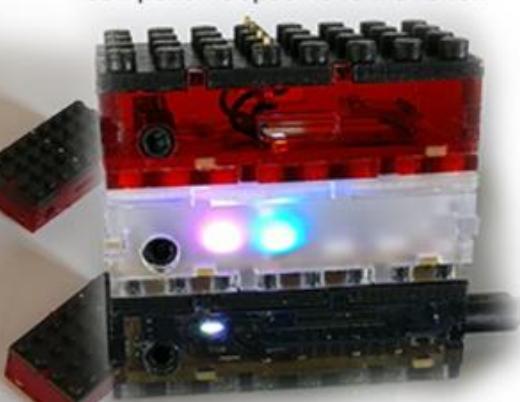
The idea is to have an ever expanding range of new bricks that are backwards compatible with previous bricks.



The bricks connect to each other when stacked because of pogo pins in the studs.



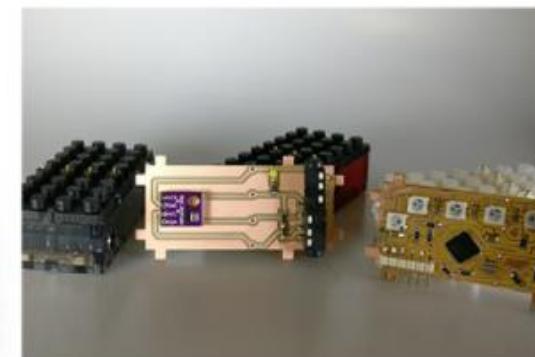
Each brick is made of:
-3D printed ABS part
-laser cut acrylic
-milled PCB
-components specific to that brick



The bricks are LEGO compatible.



Each brick holds a custom PCB with standardized dimensions.

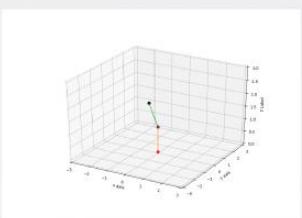


FollowMe!

FollowMe! is a robot that expands the range of capturing field dynamically. Tracking with a Pan and Tilt camera has been an important topic in computer vision for many years. With this framework, we are able to autonomously track a human face or any object, and maneuver the camera to follow the target.

Simulation

Inverse and forward kinematic
Library : NumPy, matplotlib



Embedeed Programming

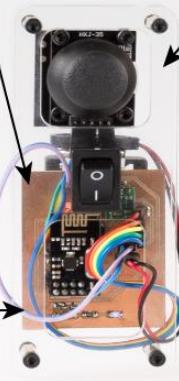
Real time motion control
State machine and switch case

Input devices

Camera, button and joystick

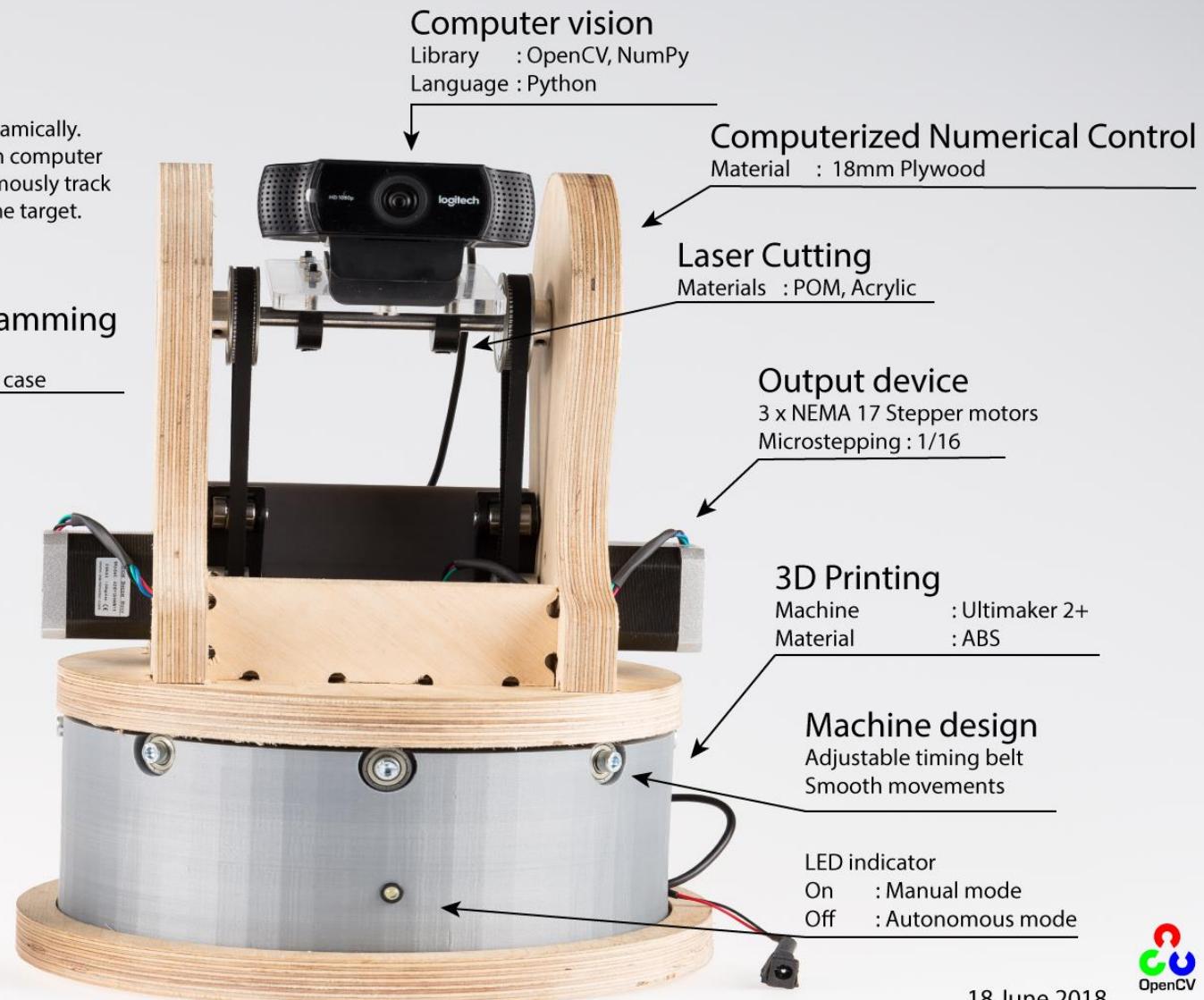
Network

Module : nRF24L01+

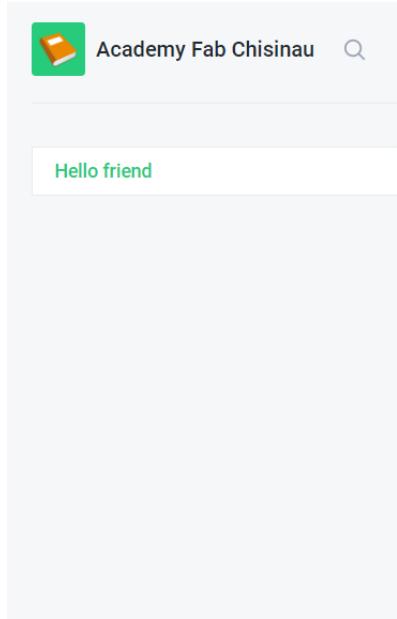


Electronics production and design

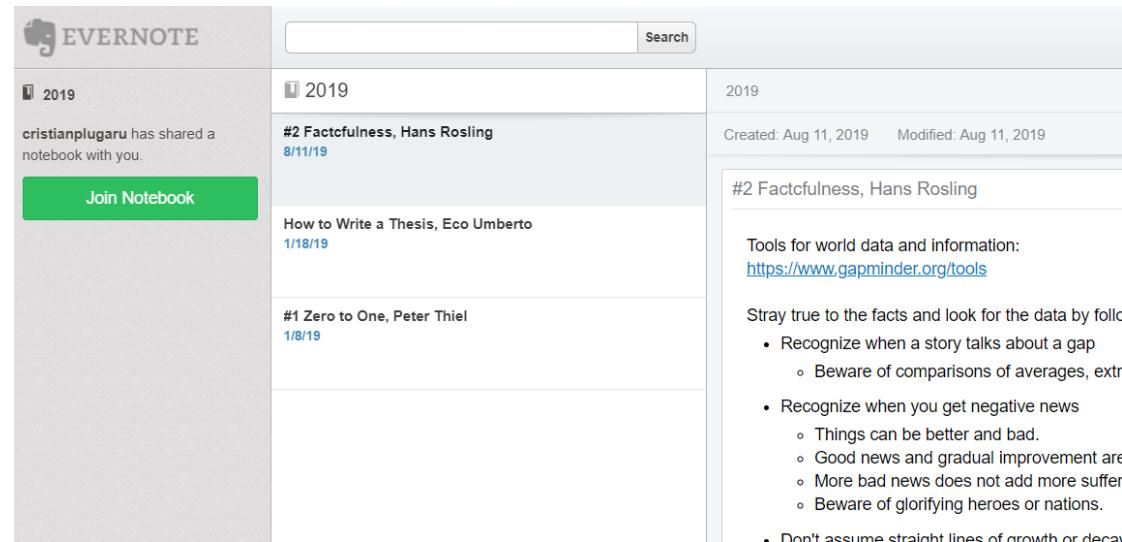
Source : Mod. satshakit-grbl
Connection : Plug and play







A screenshot of the GitBook interface. At the top, it says "Academy Fab Chisinau". Below that is a sidebar with a "Hello friend" button. The main content area has a title "Hello friend" and a text "Aici va fi documentarea ta." At the bottom, it says "Last updated 12 seconds ago".



A screenshot of the Evernote interface. It shows a list of notebooks. The first notebook is titled "#2 Factfulness, Hans Rosling" (8/11/19). The second notebook is titled "How to Write a Thesis, Eco Umberto" (1/18/19). The third notebook is titled "#1 Zero to One, Peter Thiel" (1/8/19). On the right side, there is a sidebar with a search bar, a note about the creation date (Created: Aug 11, 2019 Modified: Aug 11, 2019), and a section titled "#2 Factfulness, Hans Rosling" containing text about tools for world data and information, followed by a bulleted list of tips for staying true to facts.

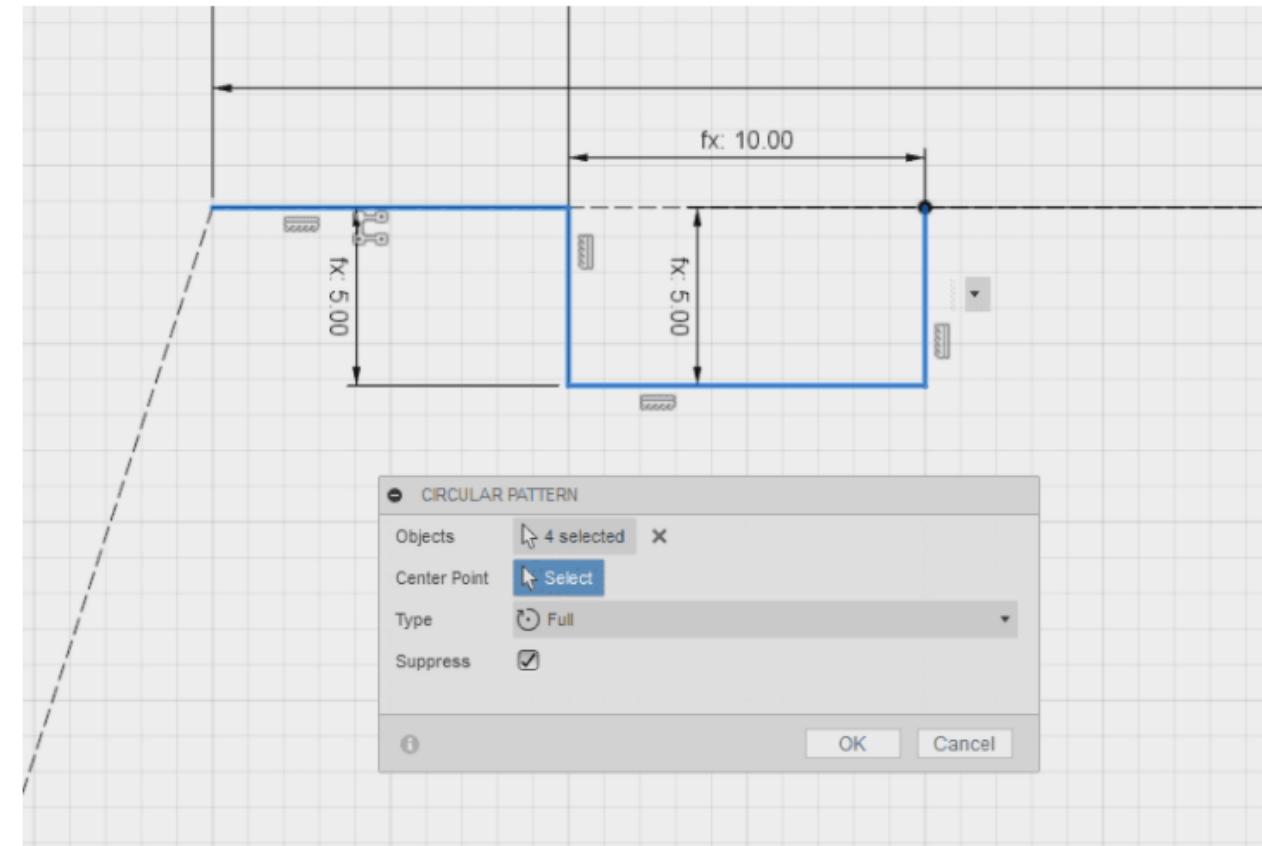
Tools for world data and information:
<https://www.gapminder.org/tools>

- Stray true to the facts and look for the data by following:
- Recognize when a story talks about a gap
 - Beware of comparisons of averages, extremes, and outliers.
- Recognize when you get negative news
 - Things can be better and bad.
 - Good news and gradual improvement are often good.
 - More bad news does not add more suffering.
 - Beware of glorifying heroes or nations.
- Don't assume straight lines of growth or decay.

I made sure to note the settings I used for each operation, to get a perspective of how each setting affects the process. By experimenting with different patterns and text writing, I could clearly get an idea how the **Vector** mode is influenced according to **Power** and **Speed**.



In a similar fashion we select our initial lines and as for the **Center Point** we indicate the center point of our pentagon.



To space the objects according to each edge, we enter **5** for the **Quantity**. This results in perfect align of each pattern tangent to each edge.

1.0_hello_friend

Cristian edited this page 2 hours ago · 19 revisions

Deadline 17.11.2020, 23:59

1. Fill Form
2. Join Slack
3. Download and install Fusion 360
4. Create Fusion 360 Free Account
5. Download and install RDWorks
6. Create Gitbook account
7. Create space titled *Academy Fab Chisinau* for documentation
8. Create first page titled *Hello friend*
9. Share space public link on Slack, [see example](#)
10. Explore projects for personal inspiration [Fab Academy 2020](#)

please use the same email on all accounts, to facilitate merging of Slack, Fusion360 and Gitbook

Acum ...

1. Cine și ce (dacă) program știe?

Împărțim în două grupe



AUTODESK®
FUSION 360™



DS SOLIDWORKS



CorelDRAW®
GRAPHICS SUITE 2019



AUTOCAD

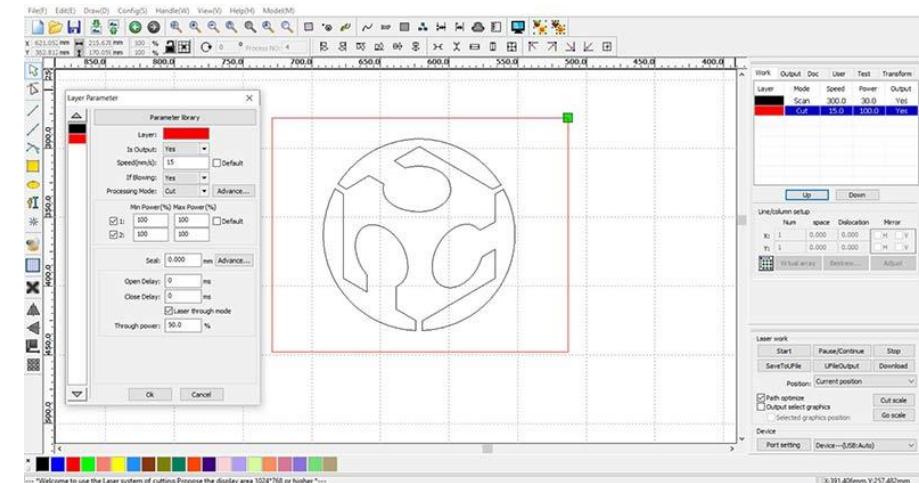


Adobe
Illustrator



INKSCAPE

2. Exemplu de la A la Z



3. Instalăm Fusion 360 și RDWorks.

let's fab