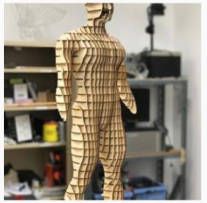
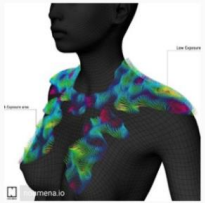
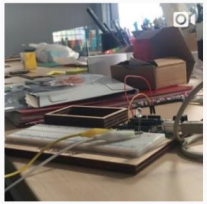






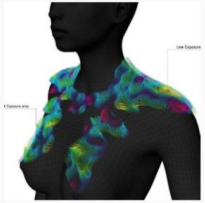




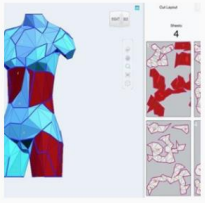




Instagram
#fabricademy











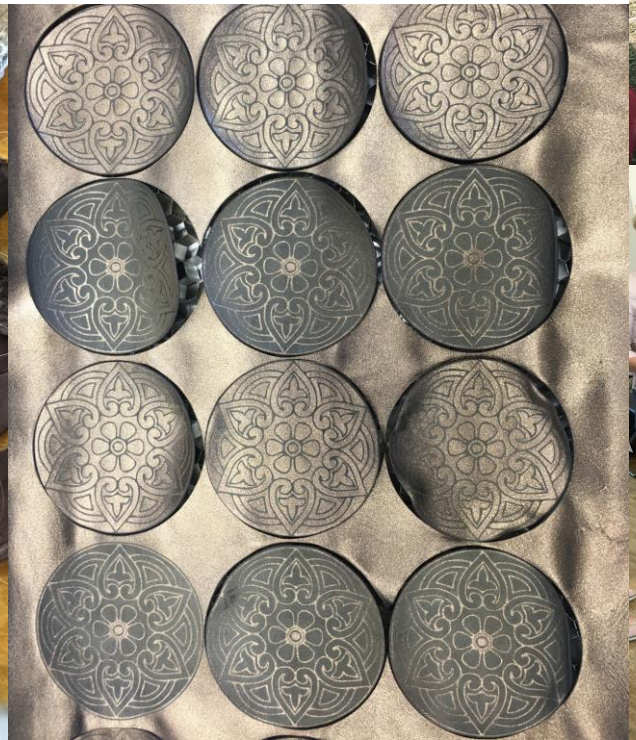



Taska

Ingi Freyr Guðjónsson


TASKA

July 2016- FATEX - Association of apparel and textile secondary school teachers



Linda Wanders

My name is Linda, from the Netherlands, 31 years old, and a background in graphic design and teaching.

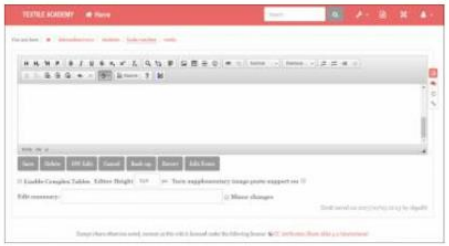
Three years ago I moved with my boyfriend to Iceland. Here, he worked on starting up the FabLab in Reykjavik, while I attended the Fab Academy.

Since then I have been involved with the FabLab, where I now work as Lab manager.

And this summer my family life took a step forward by adding a baby boy into the mix. :)

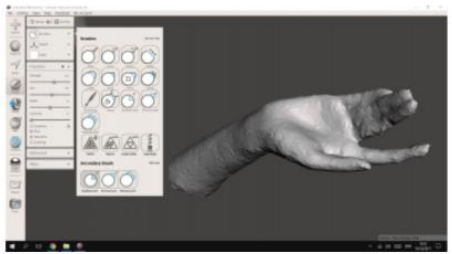
- Linkedin www.linkedin.com/in/lindawanders1/
- Fab Academy : http://fabacademy.org/archives/2014/students/wanders.linda/index.html

Weekly Assignments



Week 1

State of the art, Project Management and Documentation



Week 2

Digital Bodies

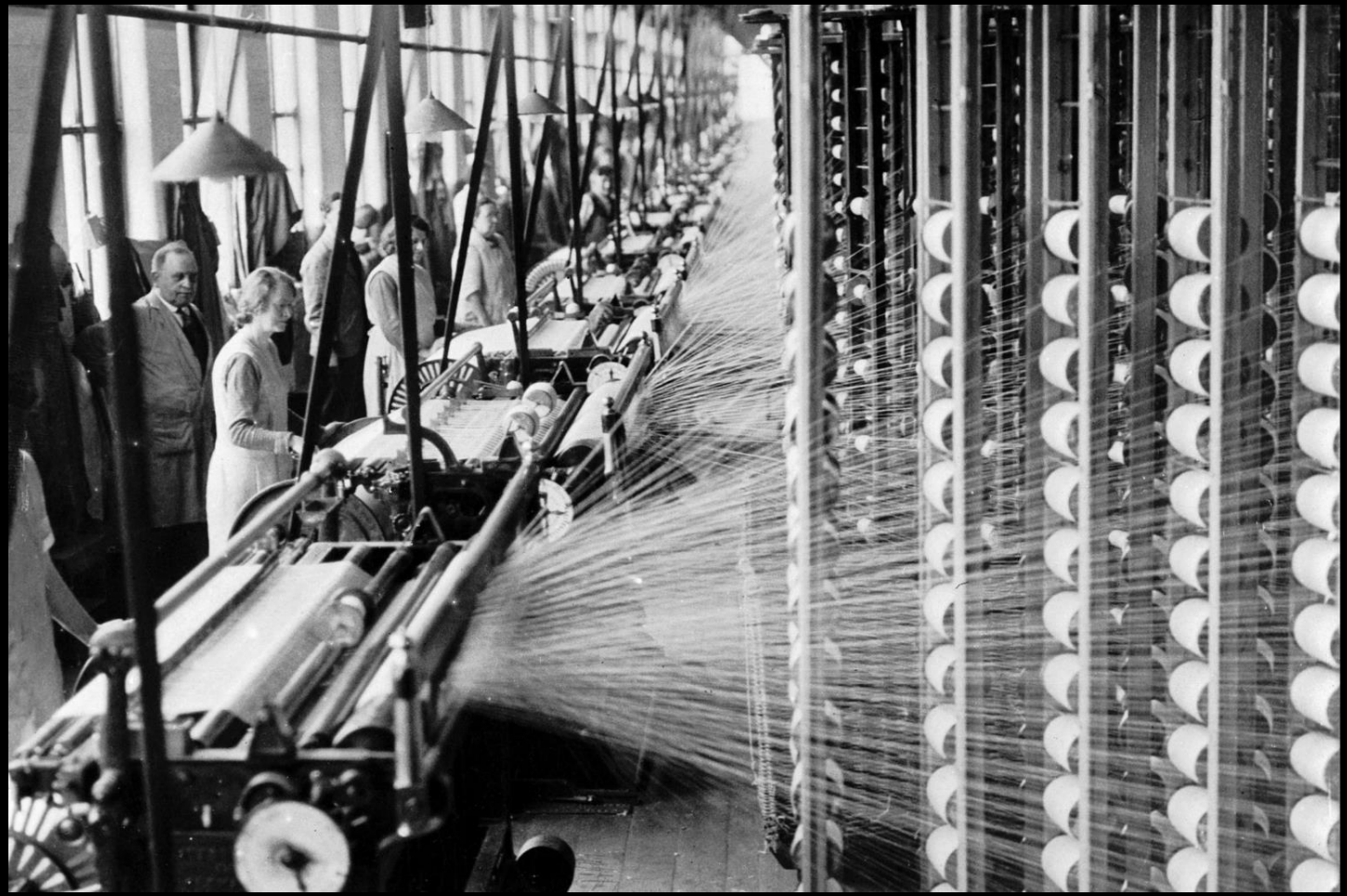
Week 3

Circular Open Source Fashion


Digital
experimental
open source
couture
Founded by
Anastasia Pistofidou
&
Fab Lab Barcelona
at 2013
FABTEXTILES


FABACADEMY
valldaura
Self Sufficient Lab
THE CENTER FOR BITS AND ATOMS
Massachusetts Institute of Technology
Iaac
Institute for advanced architecture of Catalonia
FAB LAB BCN
GREENFAB LAB
IAAC Fab Lab Barcelona
Small, Independant & Global

The
1st Industrial
Revolution
1764- cotton mill



80 billion garments produced annually

Venus of the Rags
Michelangelo Pistoletto,
1967, 1974 | Tate

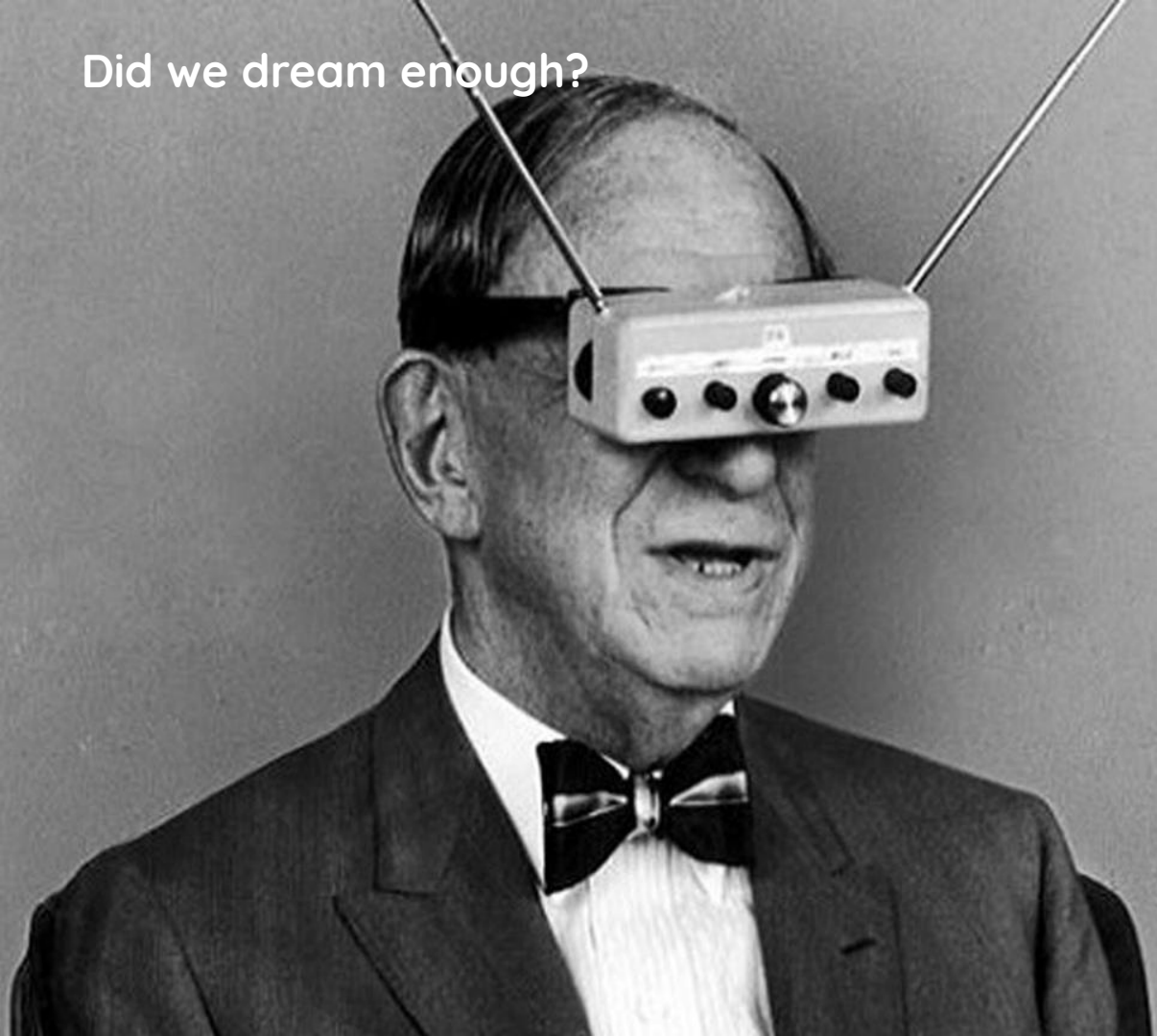
Has anything changed?

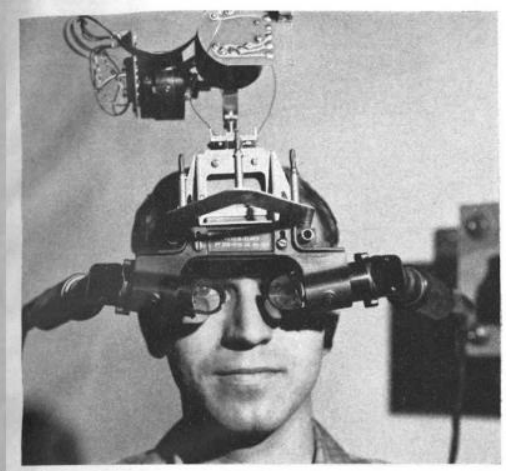
1905: Yarn spinning in the U.S. (Lewis W. Hine/George Eastman House/Getty Images)

2013: Yarn spinning in Indonesia (David Gilkey/NPR)

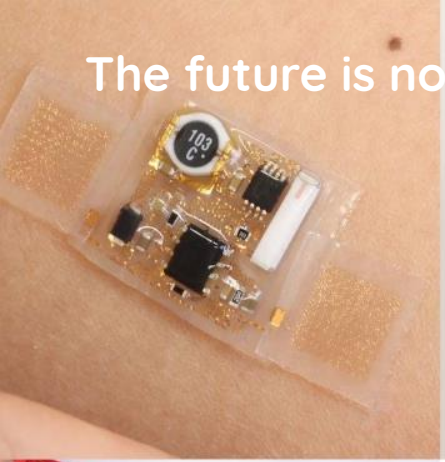
Source: Planet Money Makes A T-Shirt

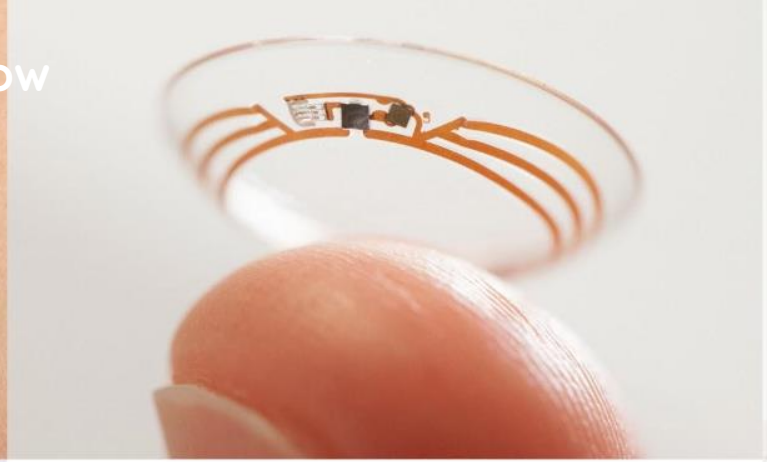
Did we dream enough?



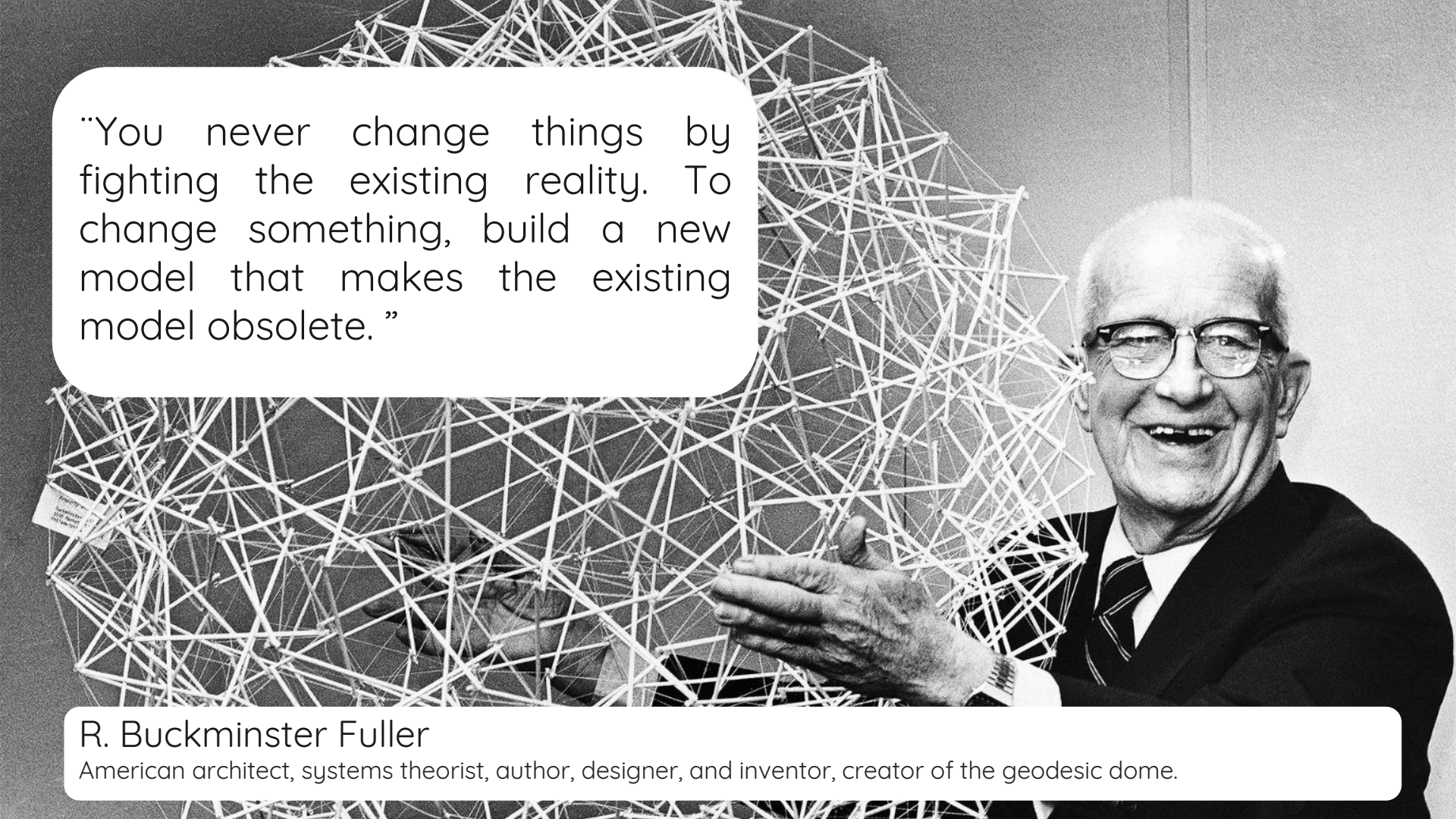


The future is now





Iris-Van-Herpen-
3D-Printed



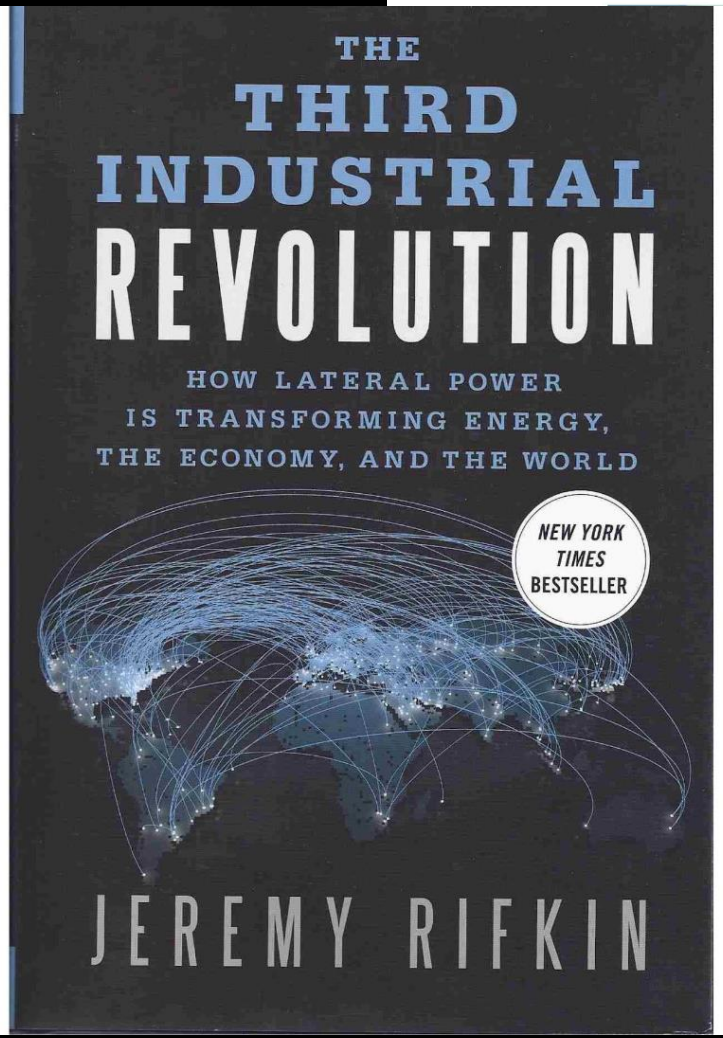
R. Buckminster Fuller

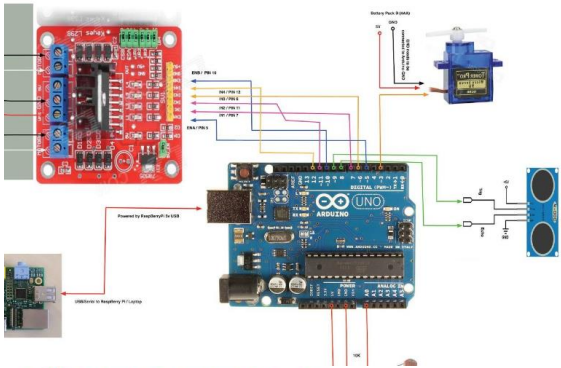
American architect, systems theorist, author, designer, and inventor, creator of the geodesic dome.

THE NEW INDUSTRIAL REVOLUTION

CHRIS ANDERSON

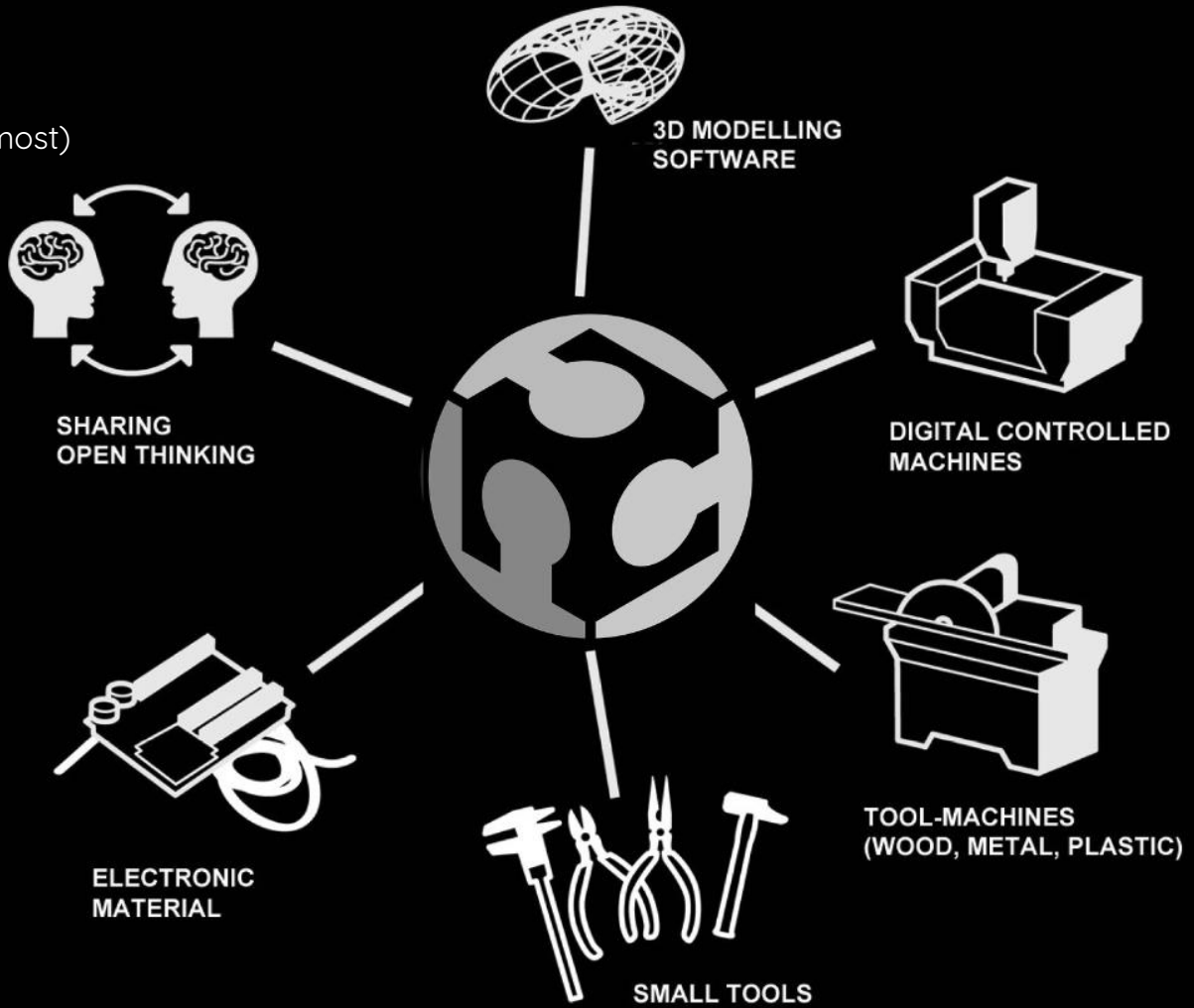
Author of the bestseller The Long Tail





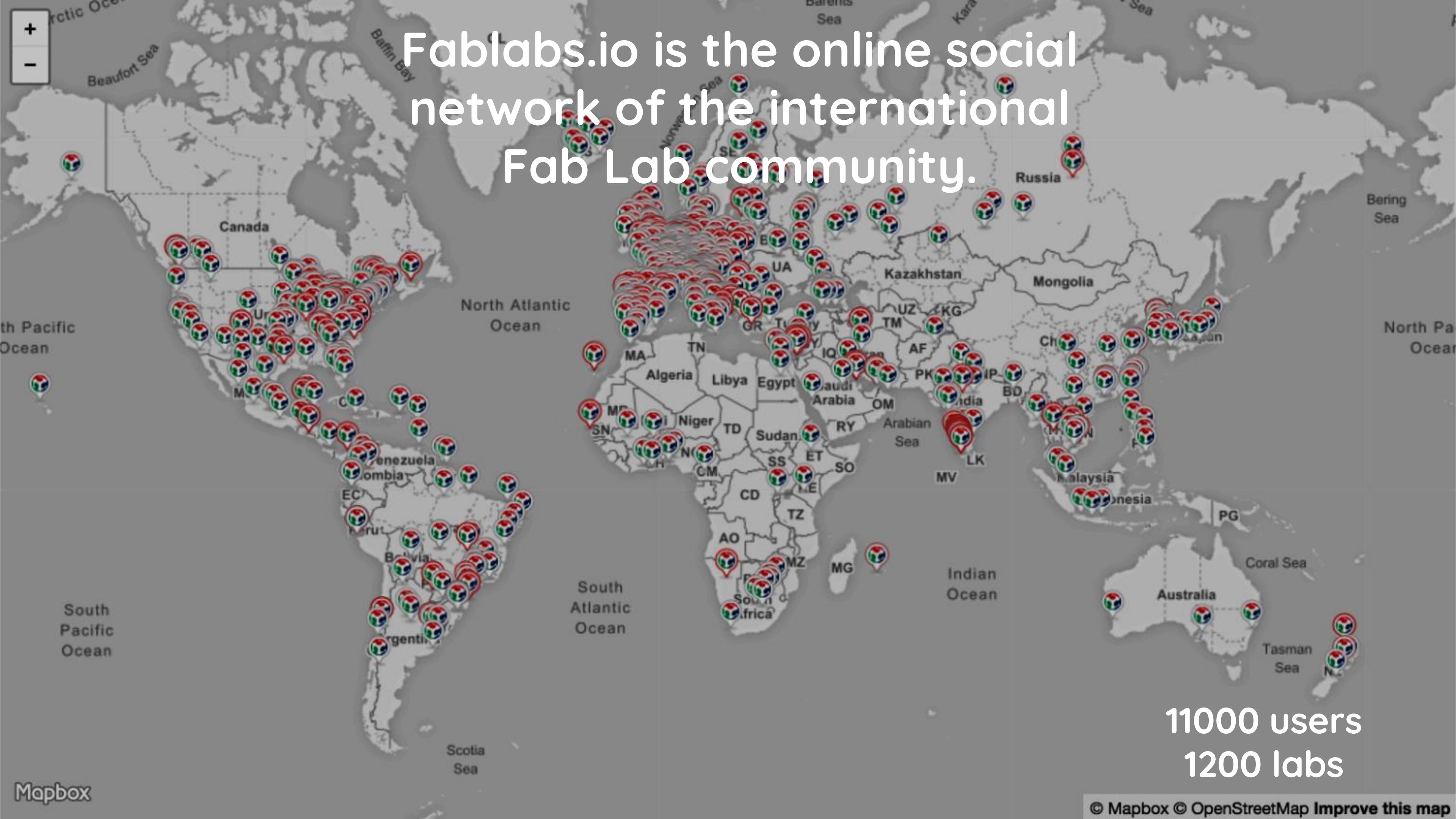
FAB LAB NETWORK

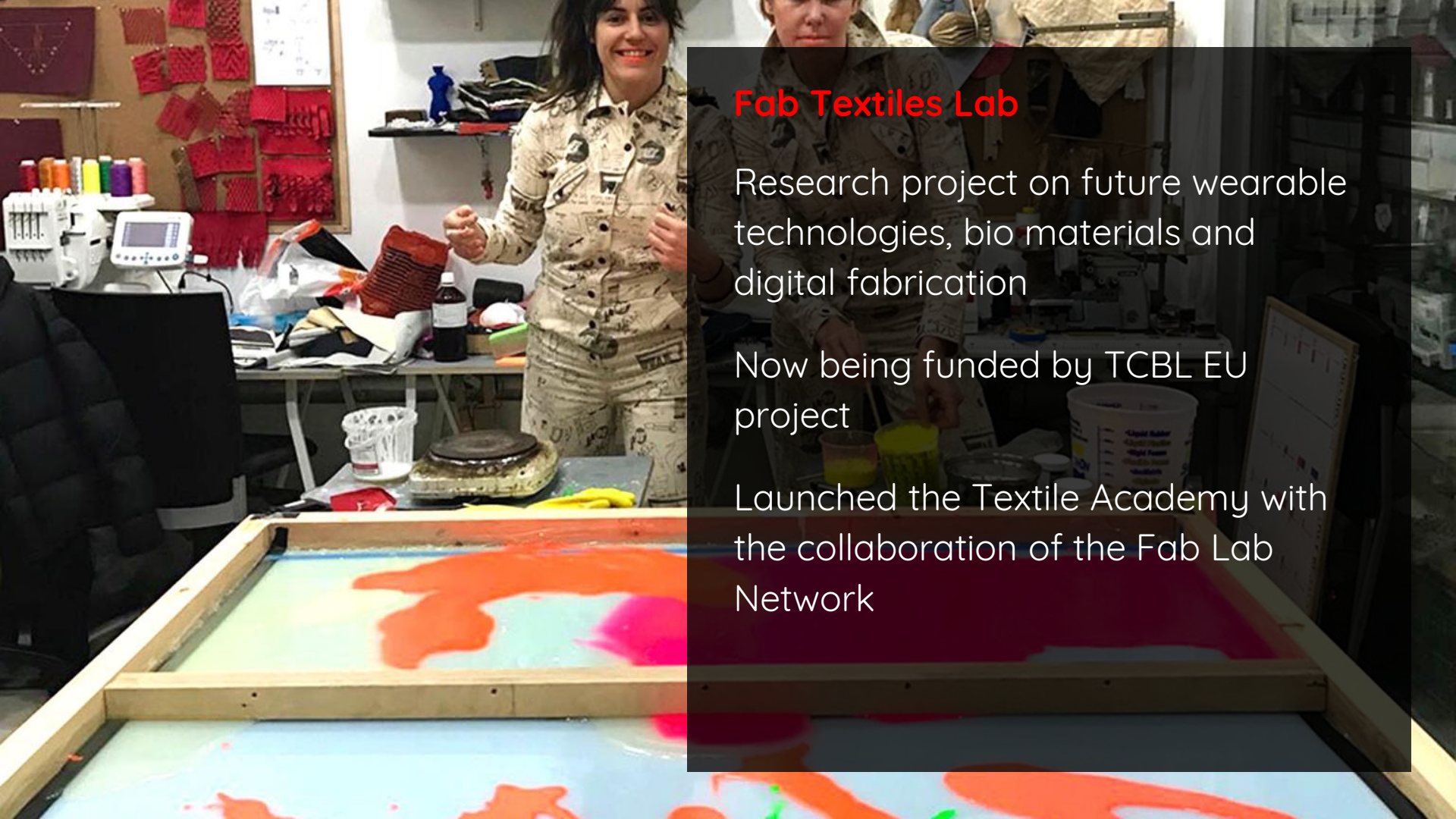
How to make (almost) anything



Fablabs.io is the online social network of the international Fab Lab community.

11000 users
1200 labs





Fab Textiles Lab

Research project on future wearable technologies, bio materials and digital fabrication

Now being funded by TCBL EU project

Launched the Textile Academy with the collaboration of the Fab Lab Network

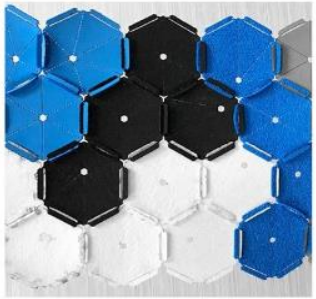
https://oscircularfashion.com
academy.org | textile-academy.org

info@textile-

Welcome to Fabricademy Open source circular fashion catalogue

Browse, share your desings and help grow this library!





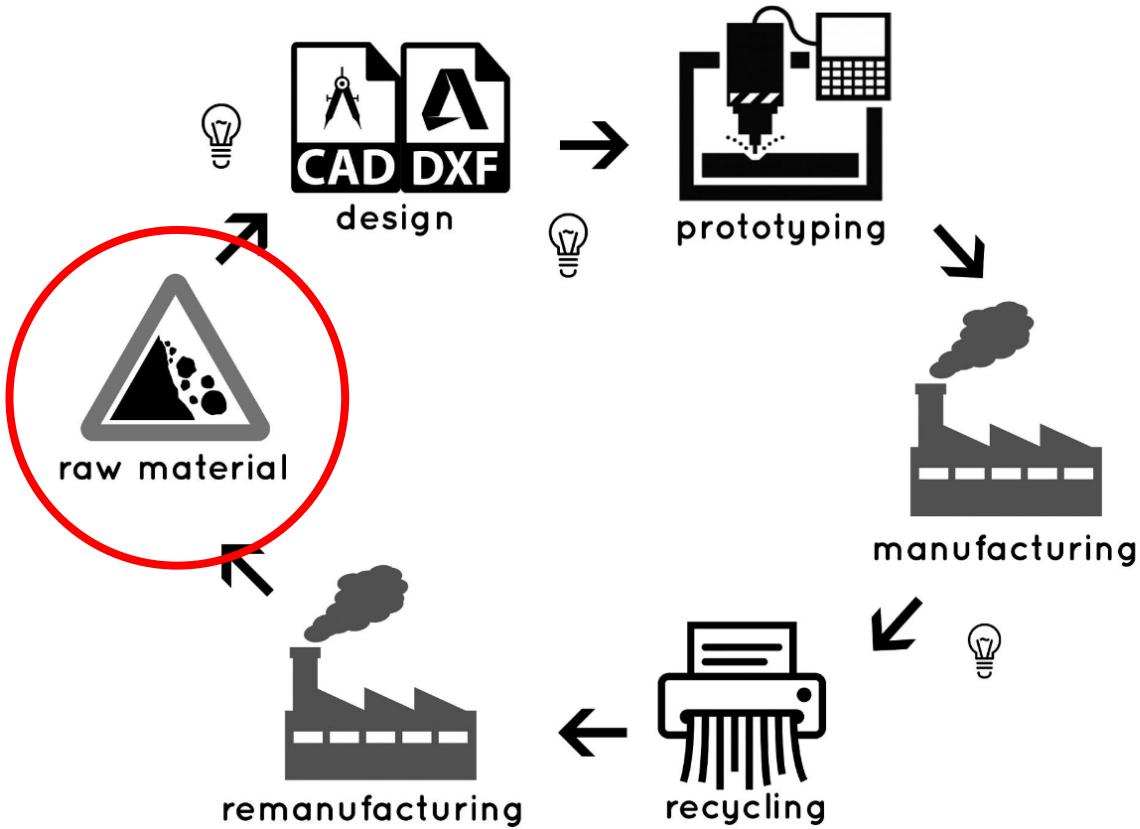


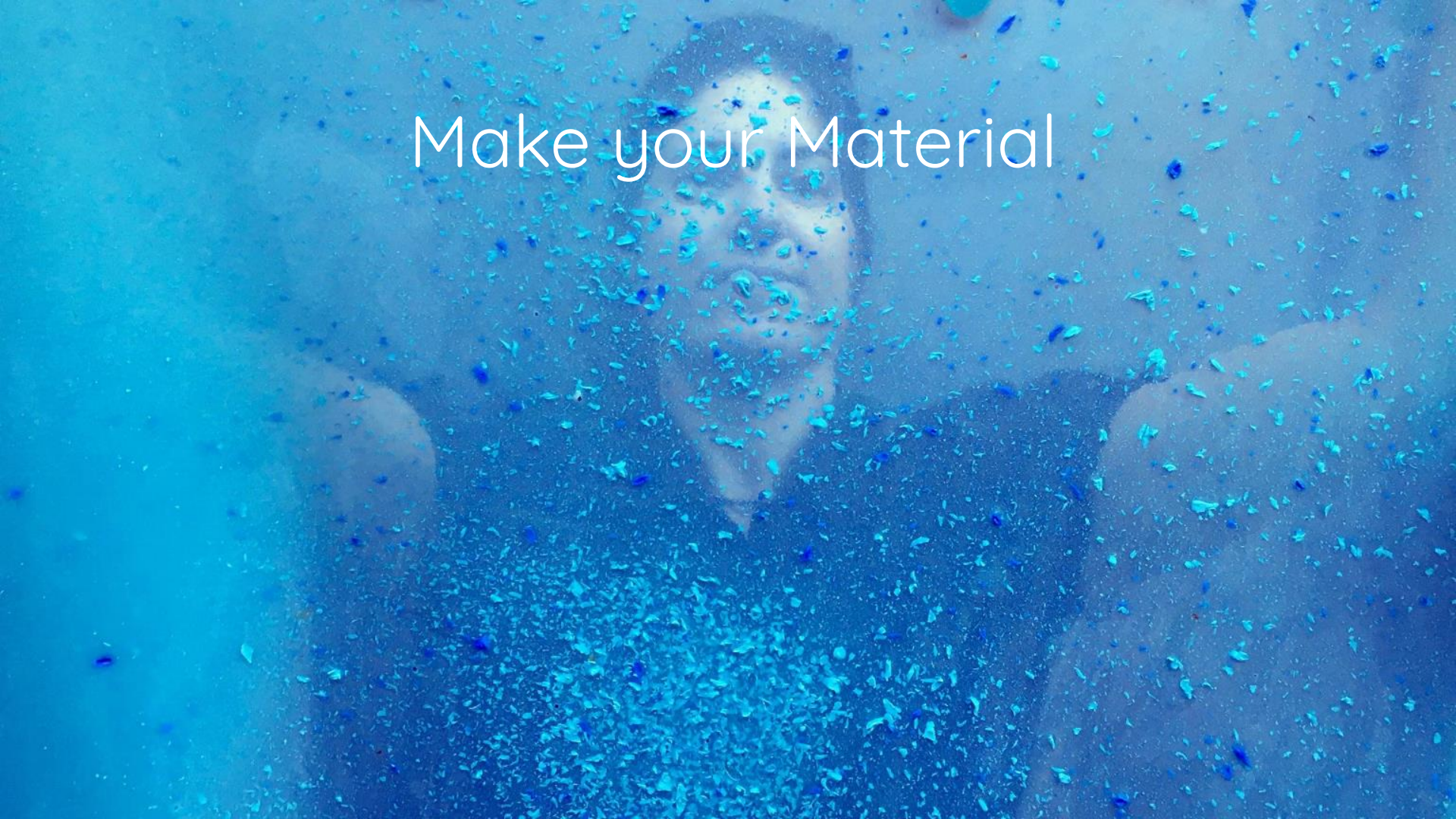


Upload & share your design

Browse all designs

Students work in Costa Rica, Veritas Moda for the international course of technology by FabTextiles


CAD
DXF
design
prototyping
manufacturing
recycling
remanufacturing
raw material

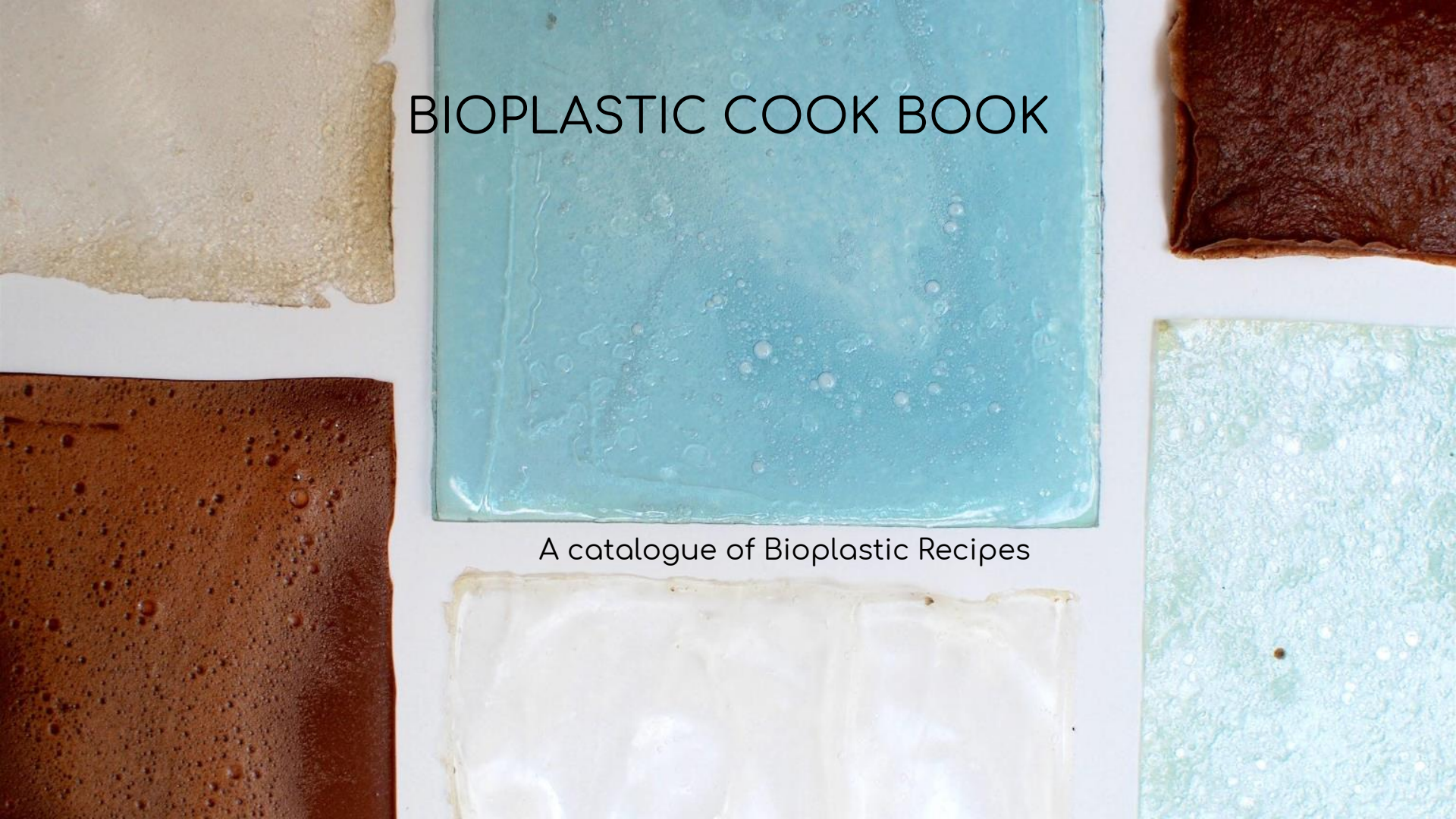

Make your Material


manufactured landscapes by
Burtynsky


G.M.O. TRIAL
RESTRICTED AREA
DO NOT ENTER

source : truecostmovie.com


THE SECRETS OF
BIOPLASTIC



BIOPLASTIC COOK BOOK

A catalogue of Bioplastic Recipes

Gelatine+Spirulina

Animal Based Bioplastic with Natural Pigment

Ingredients

Recipe	Brittle		>	Flexible
Glycerine (g)	0.0	1.8	3.6	7.2
Water (ml)	50	50	50	50
Gelatine (g)	12	12	12	12
Spirulina (ml)	10	10	10	10
Sugar (g)	4	4	4	4

Recipe

1. Dissolve sugar in 50ml of water on the burner. Once dissolved, remove from heat to cool.
2. Filter water through spirulina powder, until 10 ml of blue spirulina water has been collected. Then combine this with the cooled sugar solution.
4. Add glycerine, gelatine, and 30ml of the sugar/spirulina solution in a pot and cook on a medium heat. After 2 minutes add the remaining 30ml of solution and stir. Quickly pour into a frame on a smooth non stick surface.
5. Let the bioplastic dry according to the previously stated steps.

Spirulina is a type of cyanobacteria (algae). In its dried form it is a green powder. The colour comes from green chlorophyll, which is insoluble in water, and blue phycocyanin, which is soluble in water and therefore can be isolated by filtration. The phycocyanin protein denatures when heated but adding sugar helps to stabilize the colour. Even so, bioplastic mixtures will fade from blue to green to yellow within one minute. The best colour will be achieved if the blue solution is added within 15 seconds of casting the bioplastic.

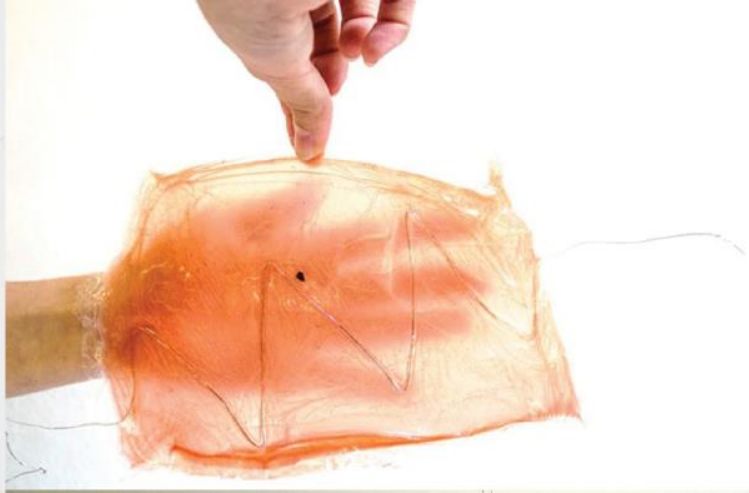
Clara Davis for fabtextiles - bioplastic bags

Bioplastic Wunderpants

Fab textiles team : Anastasia Pistofidou, Clara Davis, Mohamad Elatab, Noor Elgewely, Aldana Persia

3D printing BioPlastic

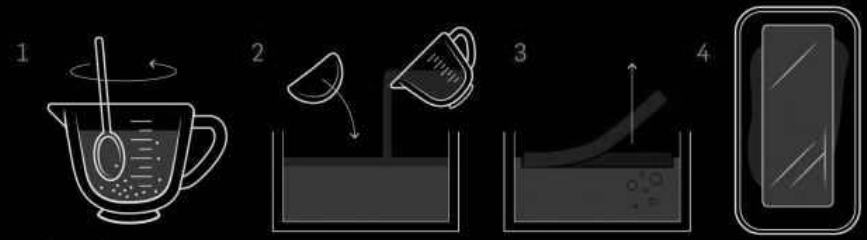
PielVivo, MAA01 DMIC in collaboration with IIT, 2016



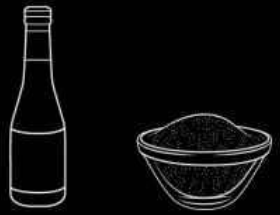

Biocouture & Bioplastics

Grow Fabric in Your Kitchen

The microbes used to brew the drink kombucha can also produce a strong, leathery cloth—no cow required. Use Suzanne Lee's recipe to make your own.



Materials:



200 milliliters of organic cider vinegar

200 grams of granulated sugar

1 live kombucha culture

2 green tea bags

Directions:

1. Brew the liquid: Boil 2 liters of water, and steep the tea for 15 minutes. Remove the tea bags and add the sugar, stirring until it's dissolved.
2. Prep the culture: Make sure the liquid is cooler than 86°F, and then pour it into your container. Add the cider vinegar and the kombucha culture. Cover the container with a cloth.
3. Harvest the mat: While it grows, the mixture should be kept at room temperature. First, the culture will sink to the bottom. You'll know fermentation has begun when bubbles and a transparent skin start to form at the surface. Over time, the culture will rise to the surface and accumulate in a thick layer. Once the mat reaches 2 centimeters in thickness (around three to four weeks), take it out of the container and gently wash it with cold, soapy water.
4. Dry the material out: Spread the sheet flat on a wooden surface. When it no longer feels wet, you can cut and sew it like any other fabric.

NOTE: This recipe will produce a piece of microbial leather as large as 7 x 6 inches, and it will take the shape of the container you put it in. To grow a larger or smaller sheet, adjust the proportions accordingly.

Suzanne Lee- Biocouture

FabTextiles 2016, kombucha bacteria leather - biocouture

How do you design

Natural VS

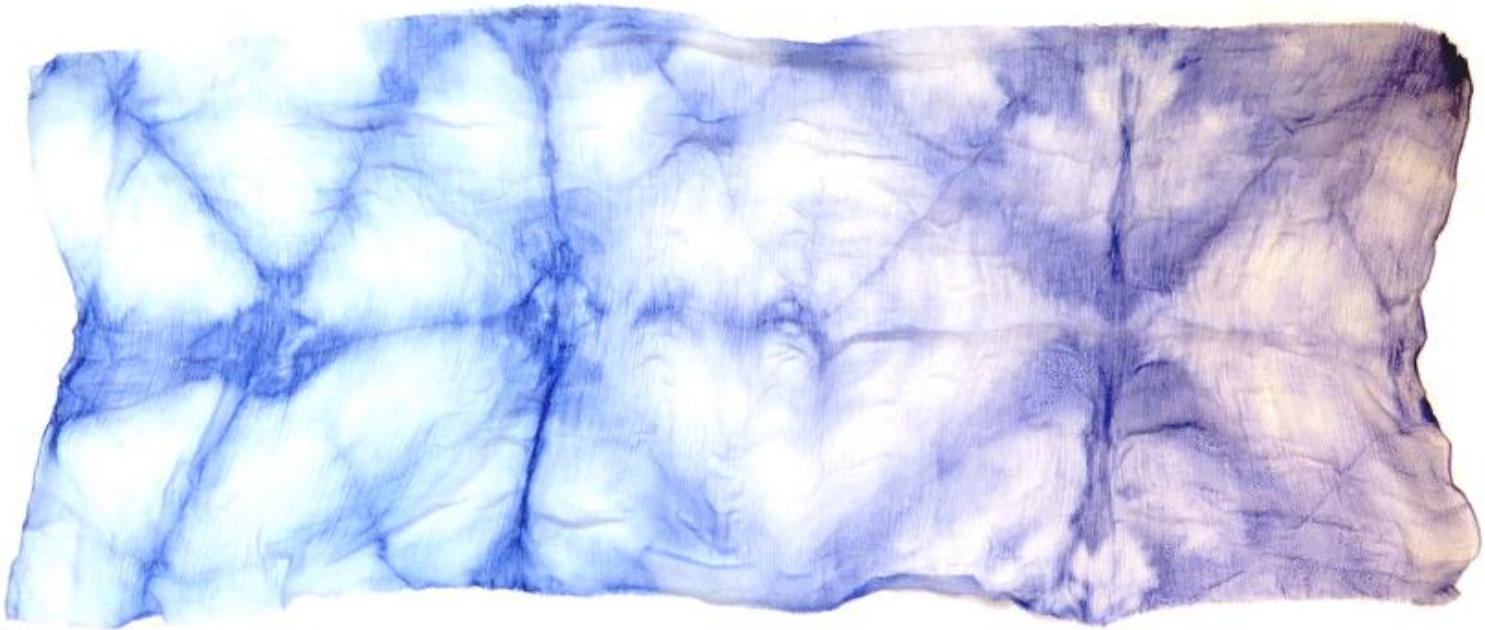

this is not a painting!
It is chemicals of the fashion industry

Textile Bacteria Dyeing

T C B L

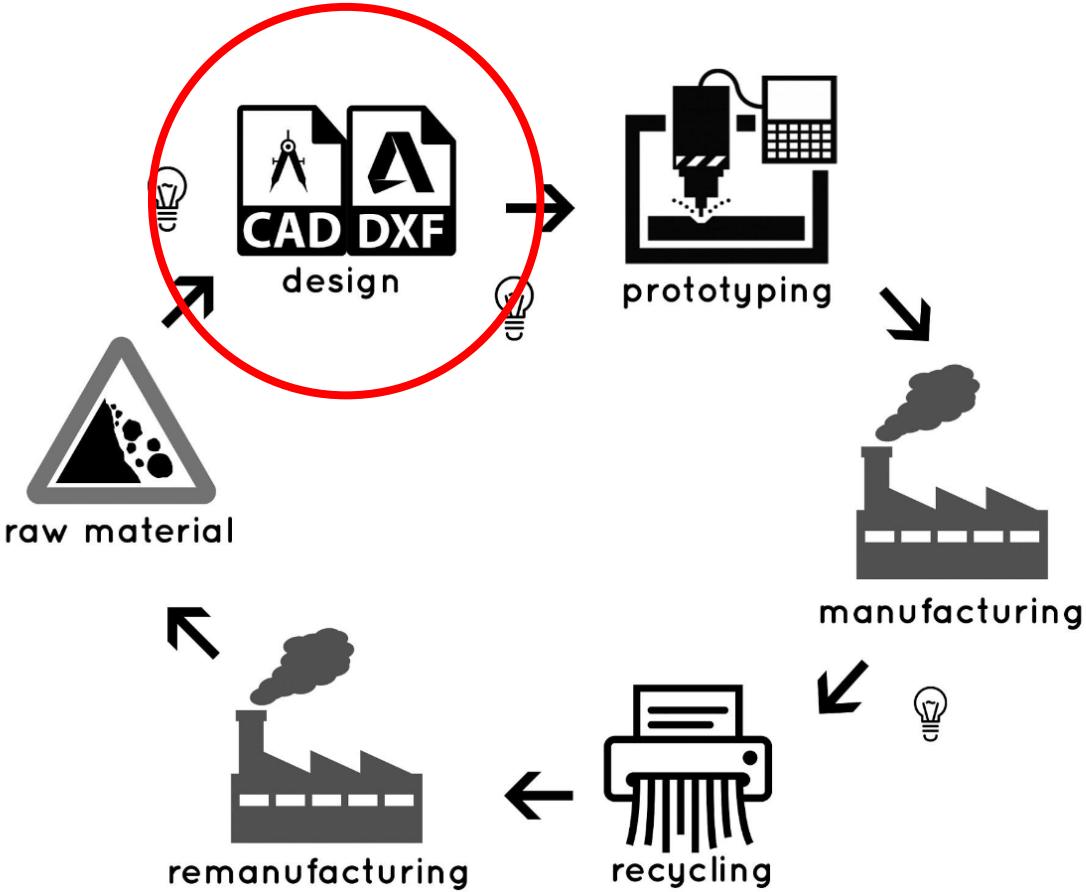
waag
textilelab amsterdam

Symbiosis between nature & human
Working with living organisms

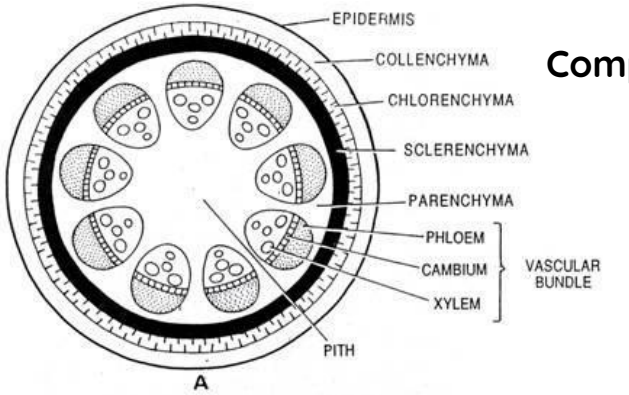


T C B L

waag
textilelab amsterdam


CAD DXF
design
prototyping
manufacturing
recycling
remanufacturing
raw material

Computing material performance



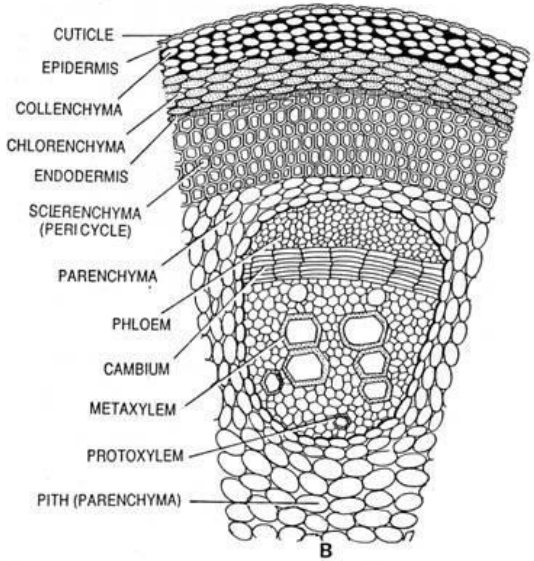
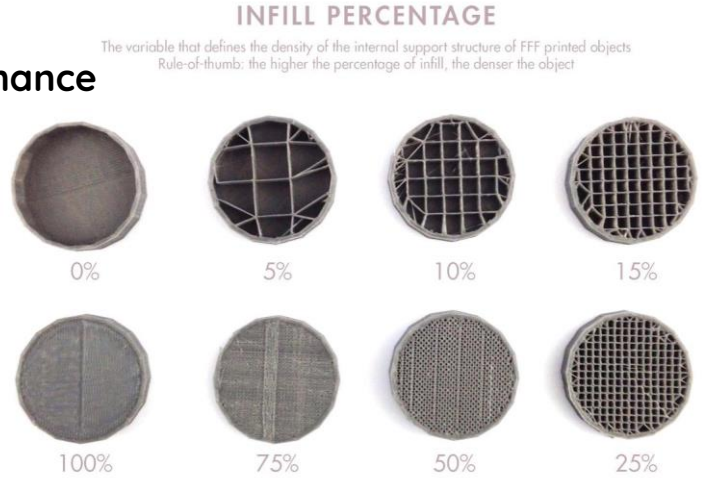
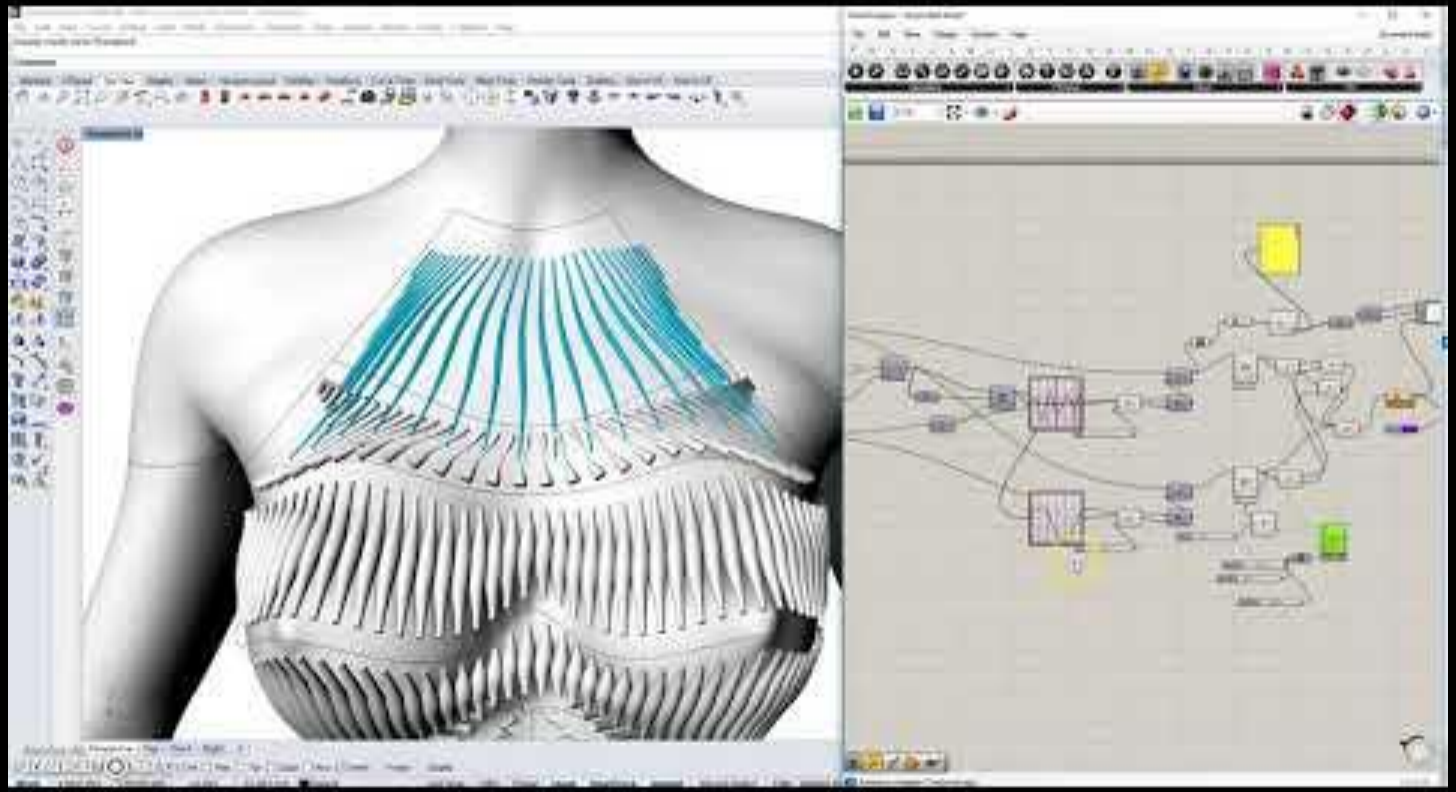
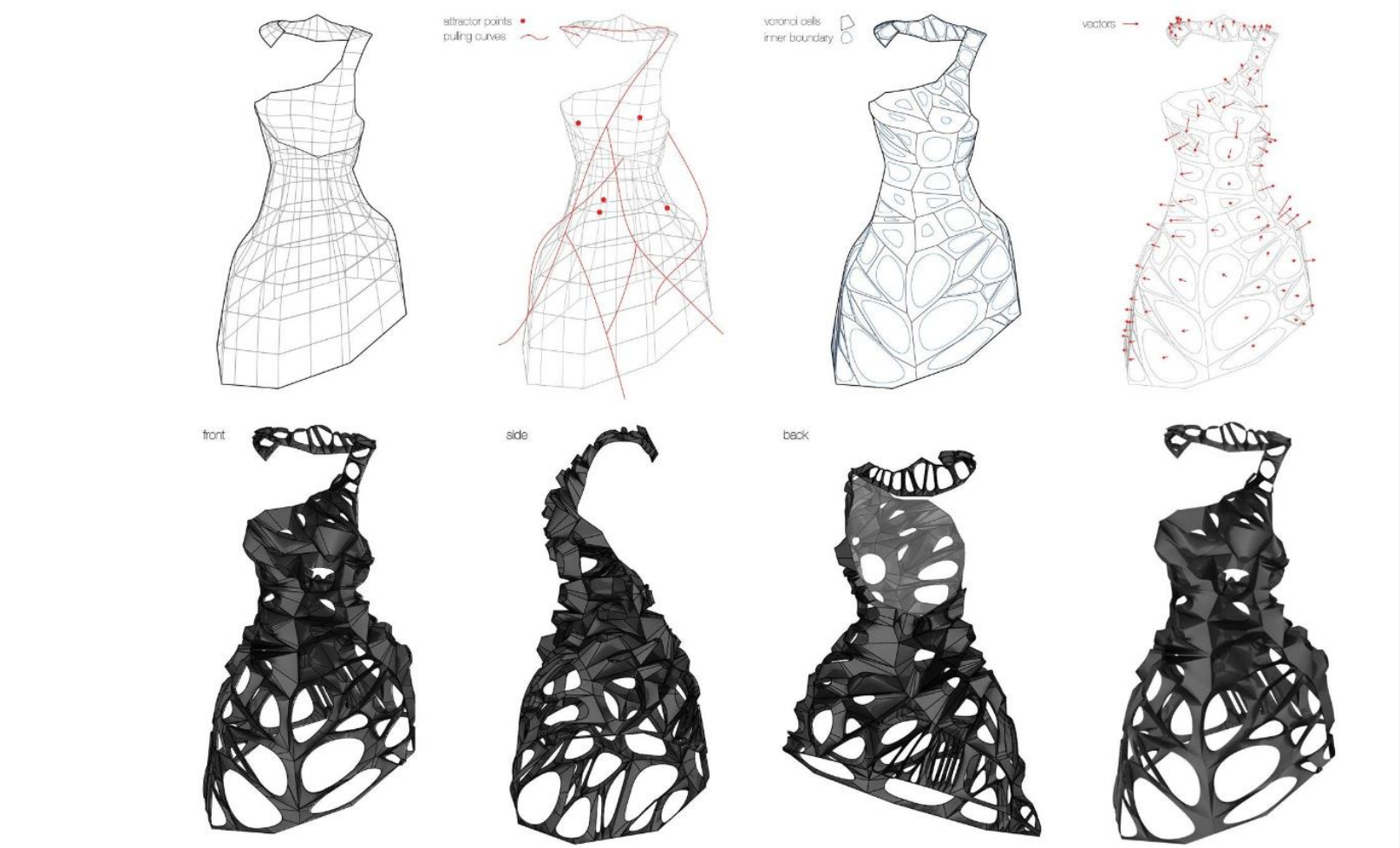


Fig. 40.13. Anatomy of dicot stem. T.S. of young stem of *Aristolochia*. A, diagrammatic; B, detail of a sector.

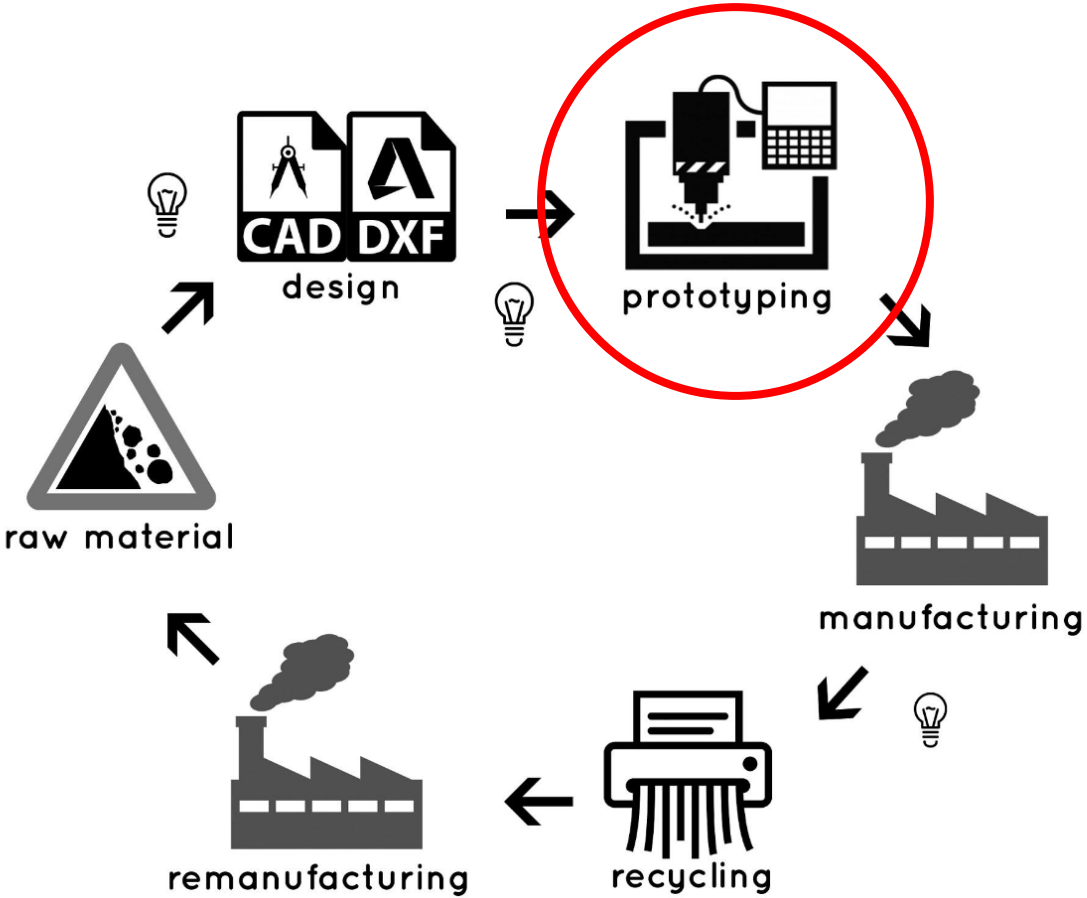


Design Systems Not Products





Parametric modeling - Rhinoceros , Grasshopper, Computational fashion, Fabtextiles in collaboration with Rodrigo Aguirre


CAD DXF
design
prototyping
manufacturing
recycling
remanufacturing
raw material

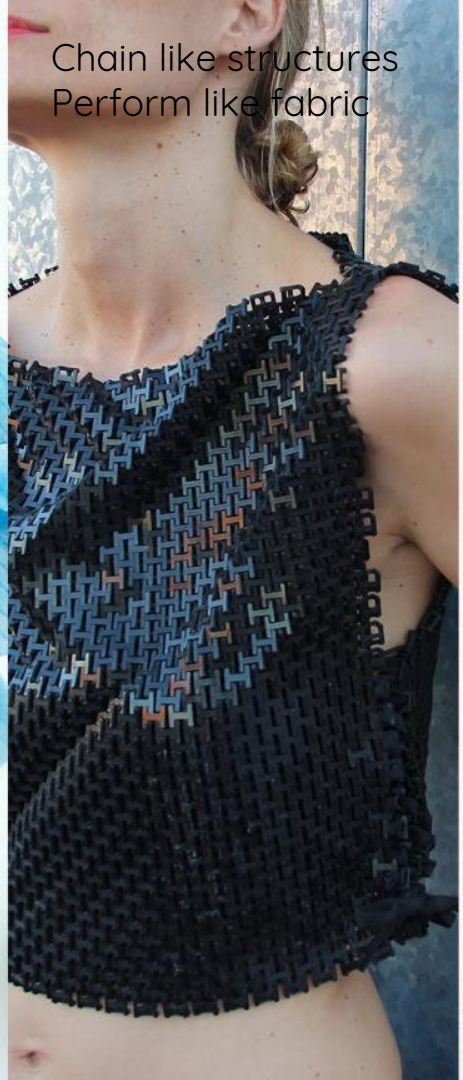
Develop new techniques and processes

Fabricademy BCN 2017, students work

3D PRINTING ON FABRICS, AS FABRICS, FOR FABRICS

PLA 3d print

Chain like structures
Perform like fabric



Mesostructures-flexures
Auxetic structures

3DPrint on fabrics

Source: Fabtextiles.org


Leather molding

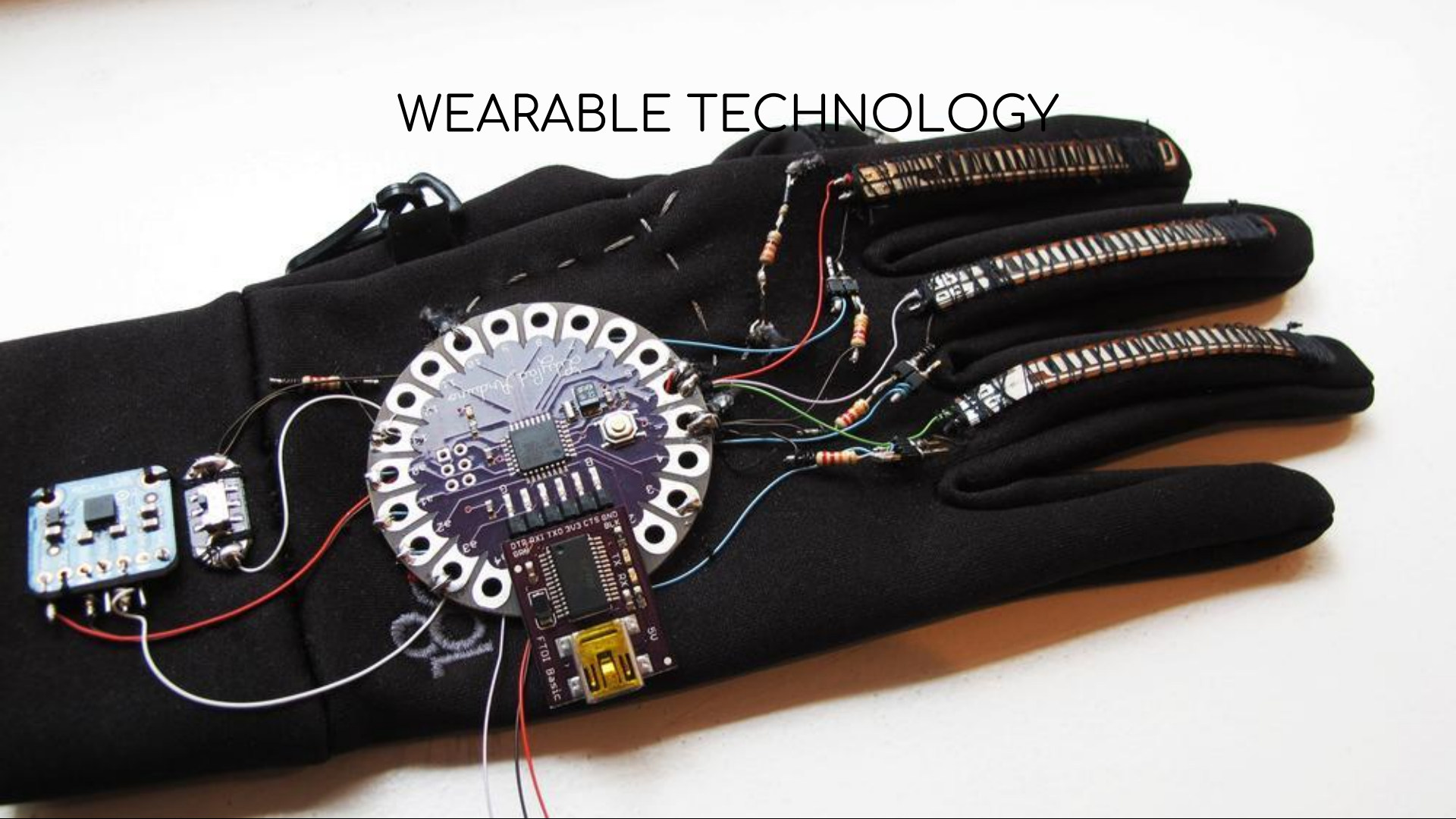
LEATHER MOULDING

Blending traditional moulding techniques with digital fabrication

Machinery : CNC milling machine – Vacuum forming - Sewing machine for leather

3D Modeling with: Rhinoceros – Grasshopper

WEARABLE TECHNOLOGY



Wearable Technology

Led circuit

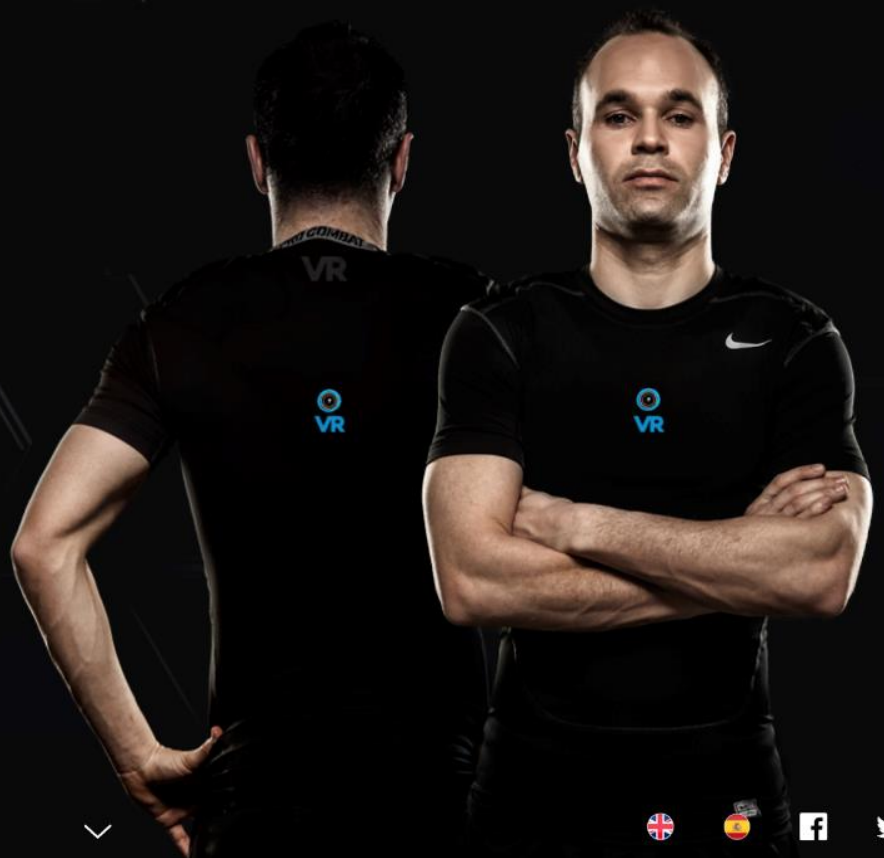
NEW PRODUCT

FIRSTVISION VR

THE FIRST EVER VR BODY-CAM

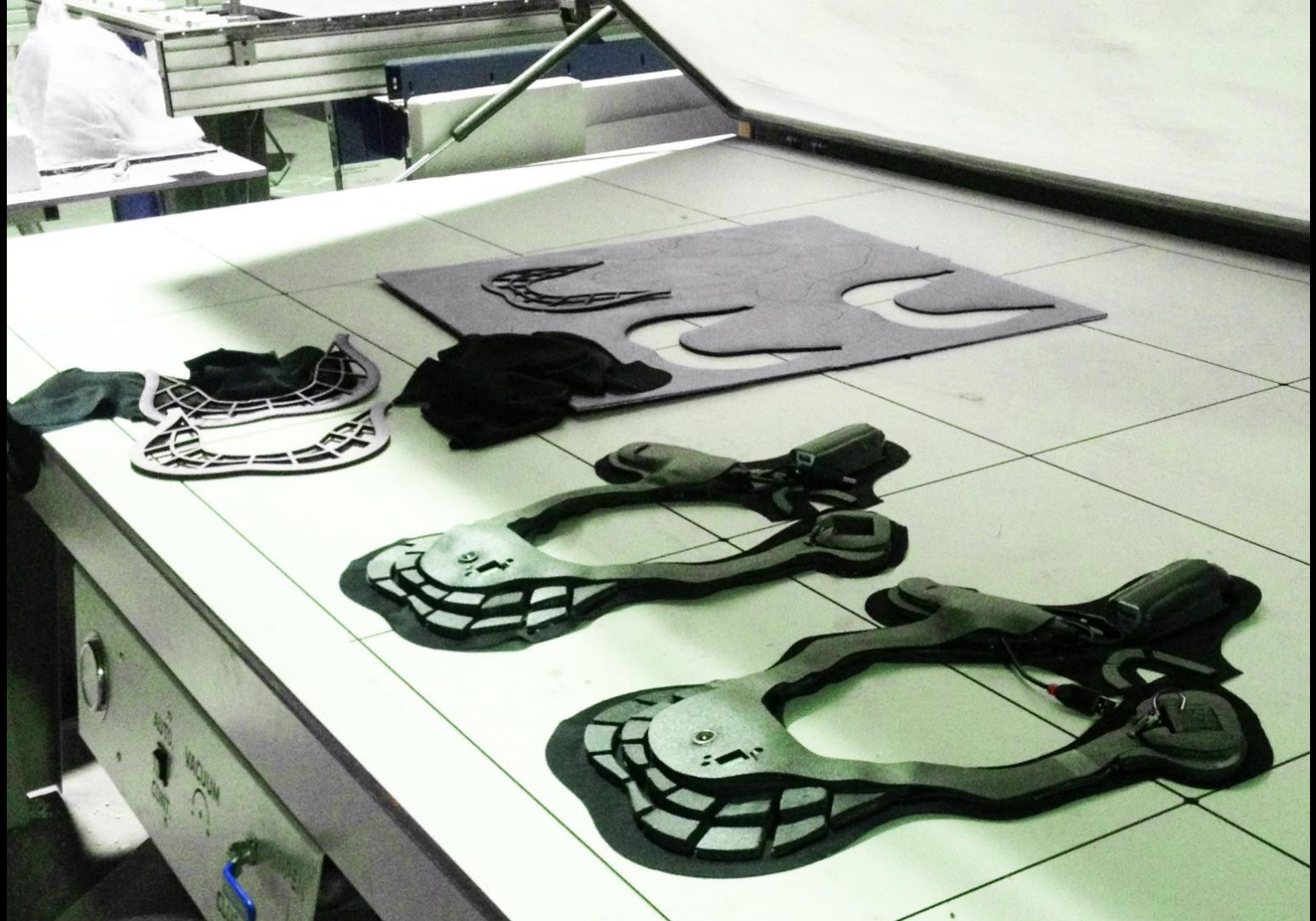
Inmerse yourself fully into the sports action with content from the first ever virtual reality Body-Cam which records the action in 360º with two lenses on-board (front and back). Now, the best and most epic sports Point-of-View content can be experienced in Virtual Reality.

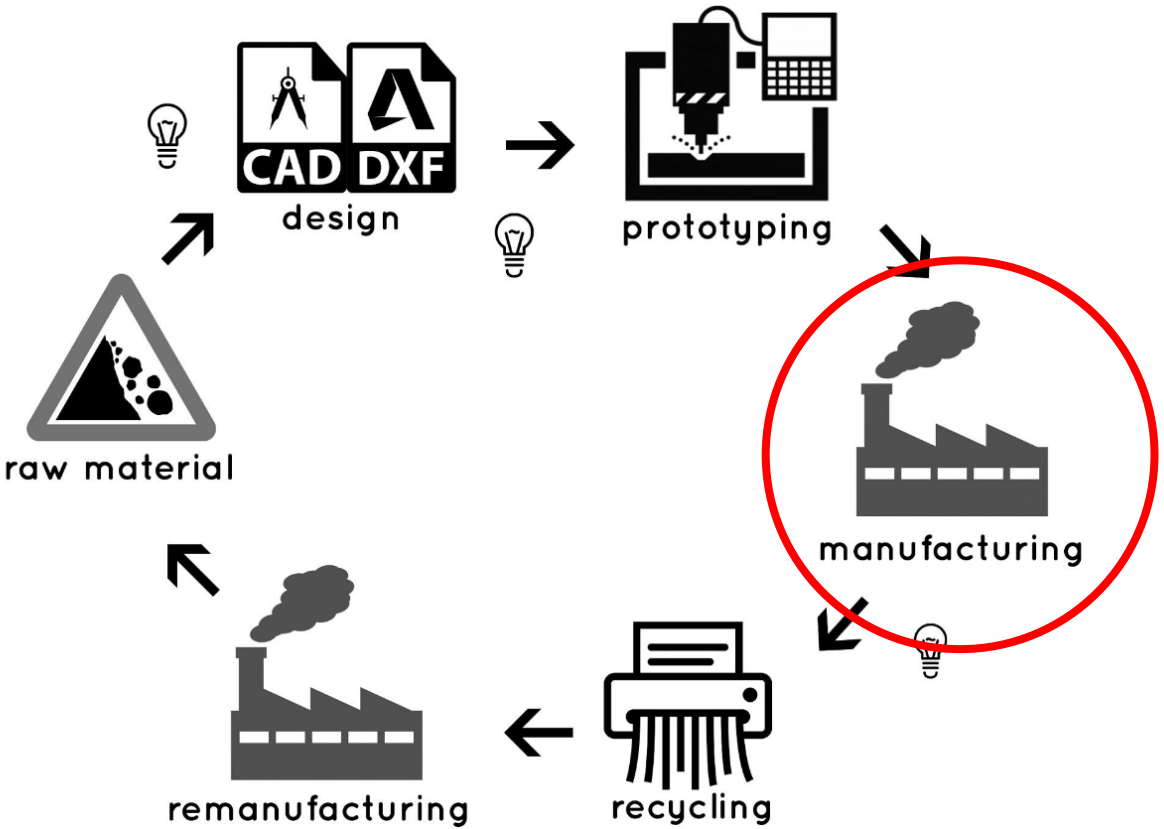
2 cameras - Chest & back
185º Field of fivision (FOV)
165min de autonomy



FirstV1sion
Hardware development
Integration design

selected @ Inter Make it
Wearable Competition

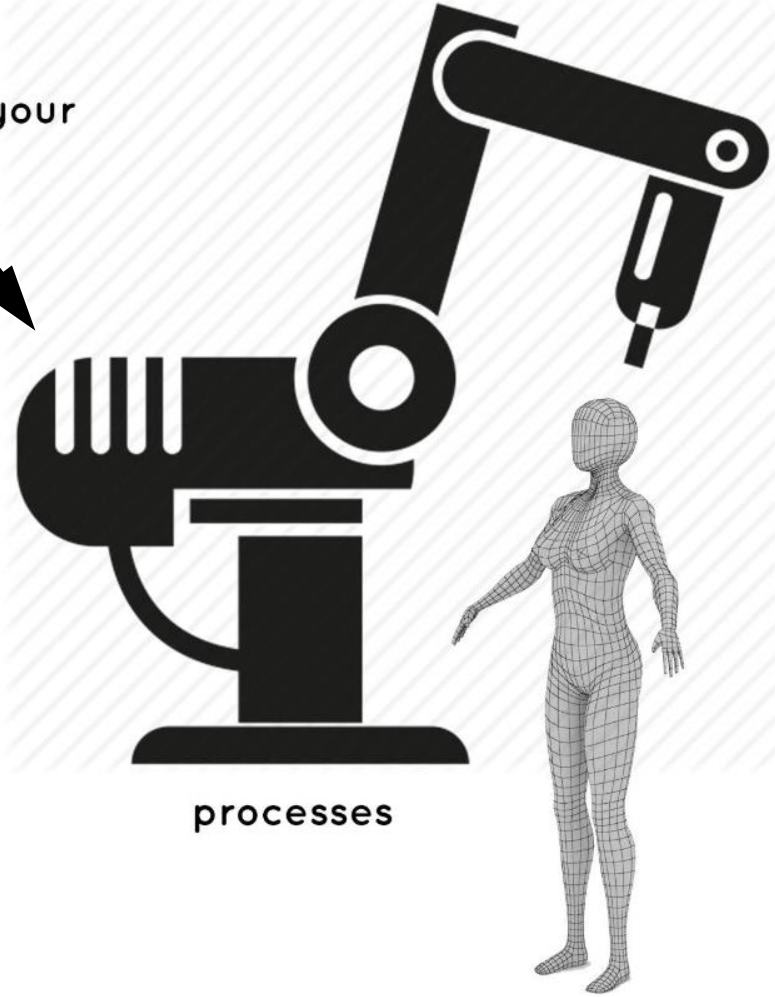



CAD DXF
design
prototyping
manufacturing
recycling
remanufacturing
raw material

Design and make your

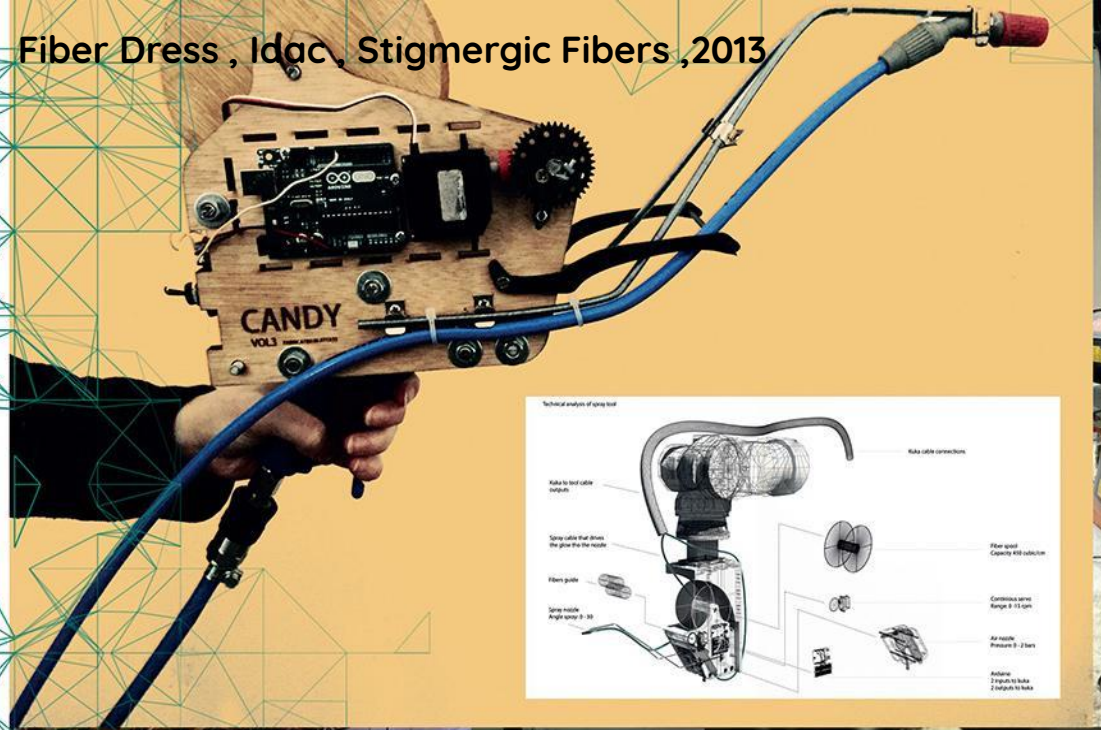
materials

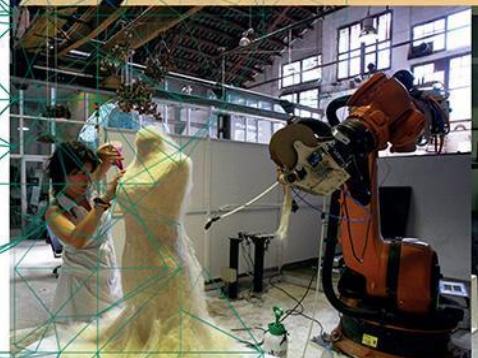
tools



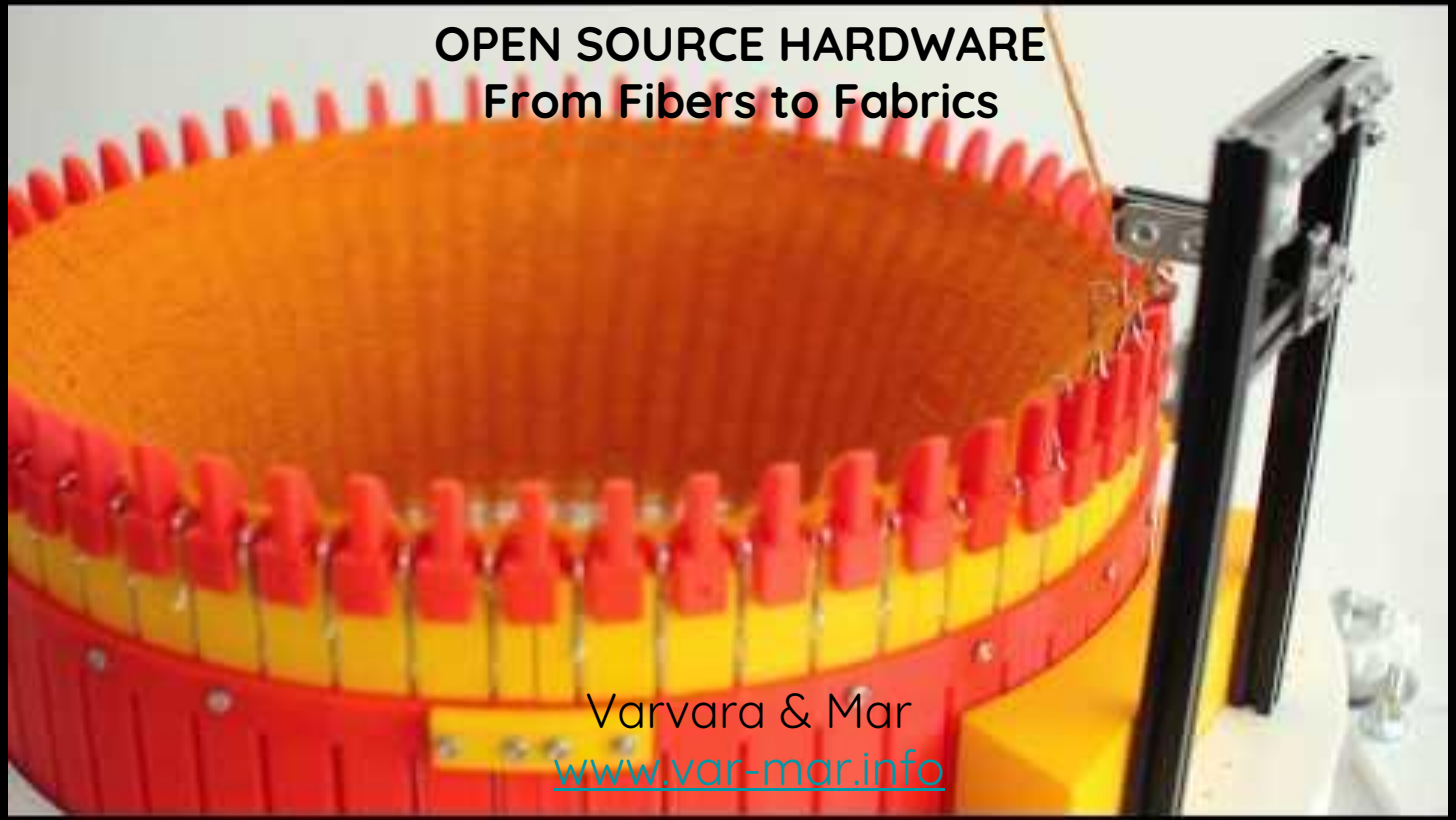
processes

Fiber Dress , Idac , Stigmergic Fibers ,2013





OPEN SOURCE HARDWARE
From Fibers to Fabrics



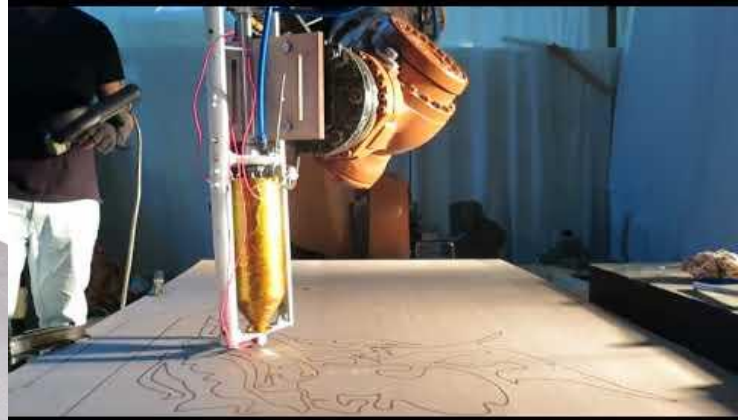
Varvara & Mar
www.var-mar.info

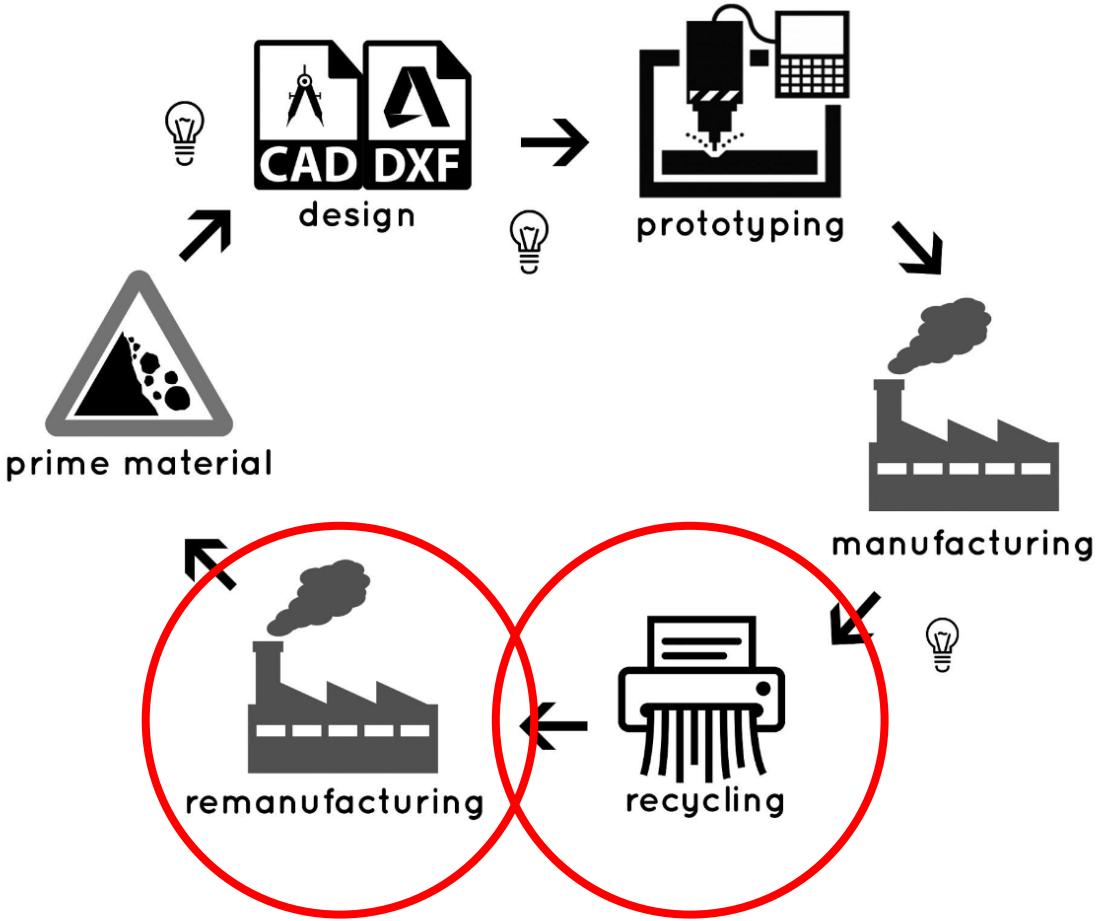
Hack a machine to fit your purpose!

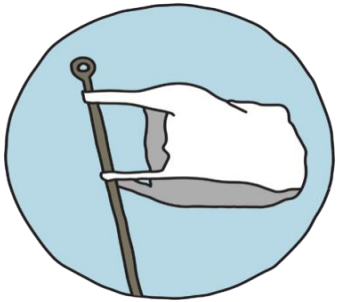
Experimental tool for numerically controlled Batik - wax printing on fabrics

Fabricademy BCN 2017

Bati[k]uka Extruder




CAD
DXF
design
prototyping
manufacturing
recycling
remanufacturing
prime material



PRECIOUS PLASTIC

FROM PLASTIC TO PLASTIC
EASY ☺


Residencies


Iaac FAB LAB BARCELONA
PLYMOUTH COLLEGE of ART
Ensci les-ateliers
Co-funded by the Creative Europe Programme of the European Union
MADE eu
Digital Fabrication meets Crafts


LAURA MARTINEZ


ALFIE SMITH


MATTHEW BUSH

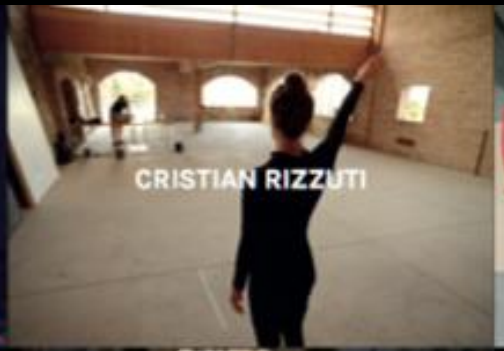

JACK WEST


ROMAN TORRE


ANNEMIE MAES


ADRIANA IONASCU


FARMING SOUL



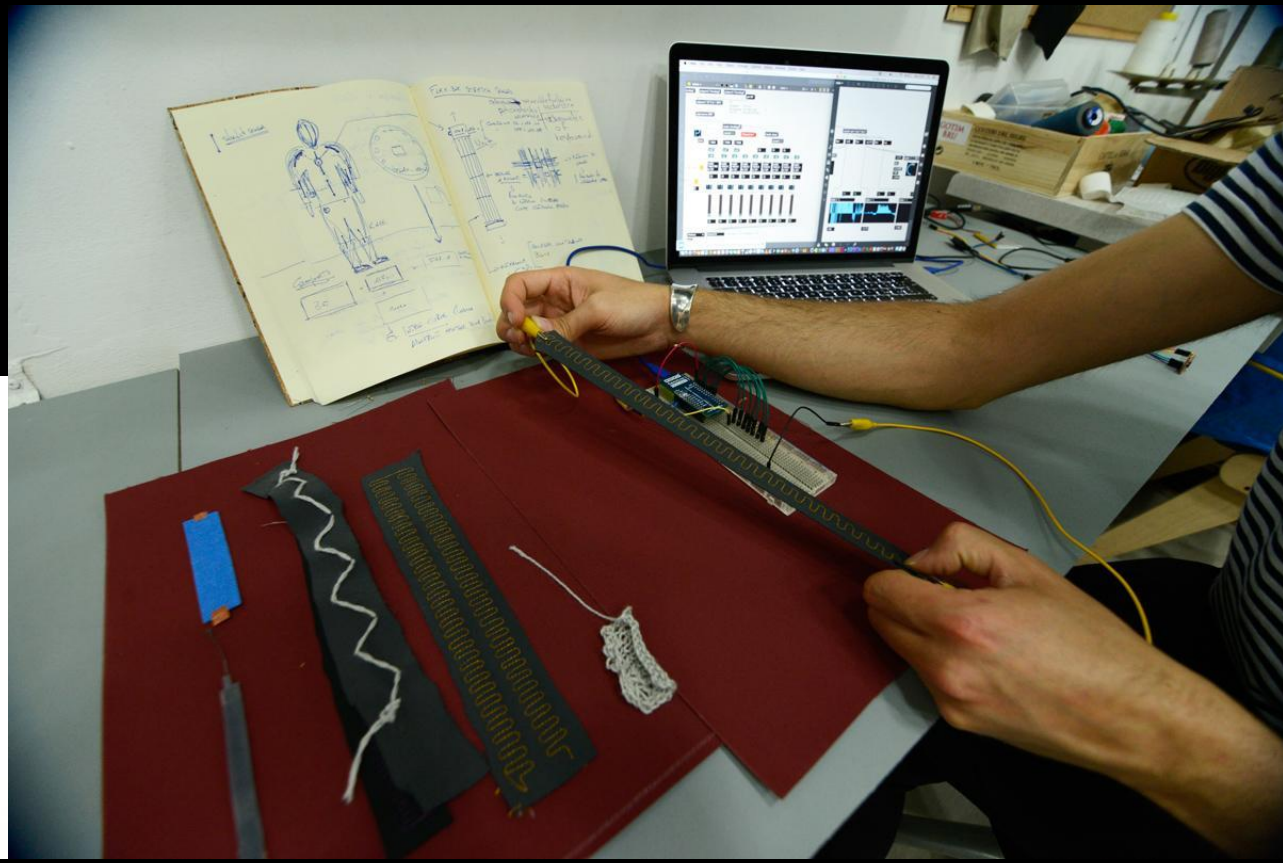
check out all the artist's profiles and projects at **made.eu/artists**

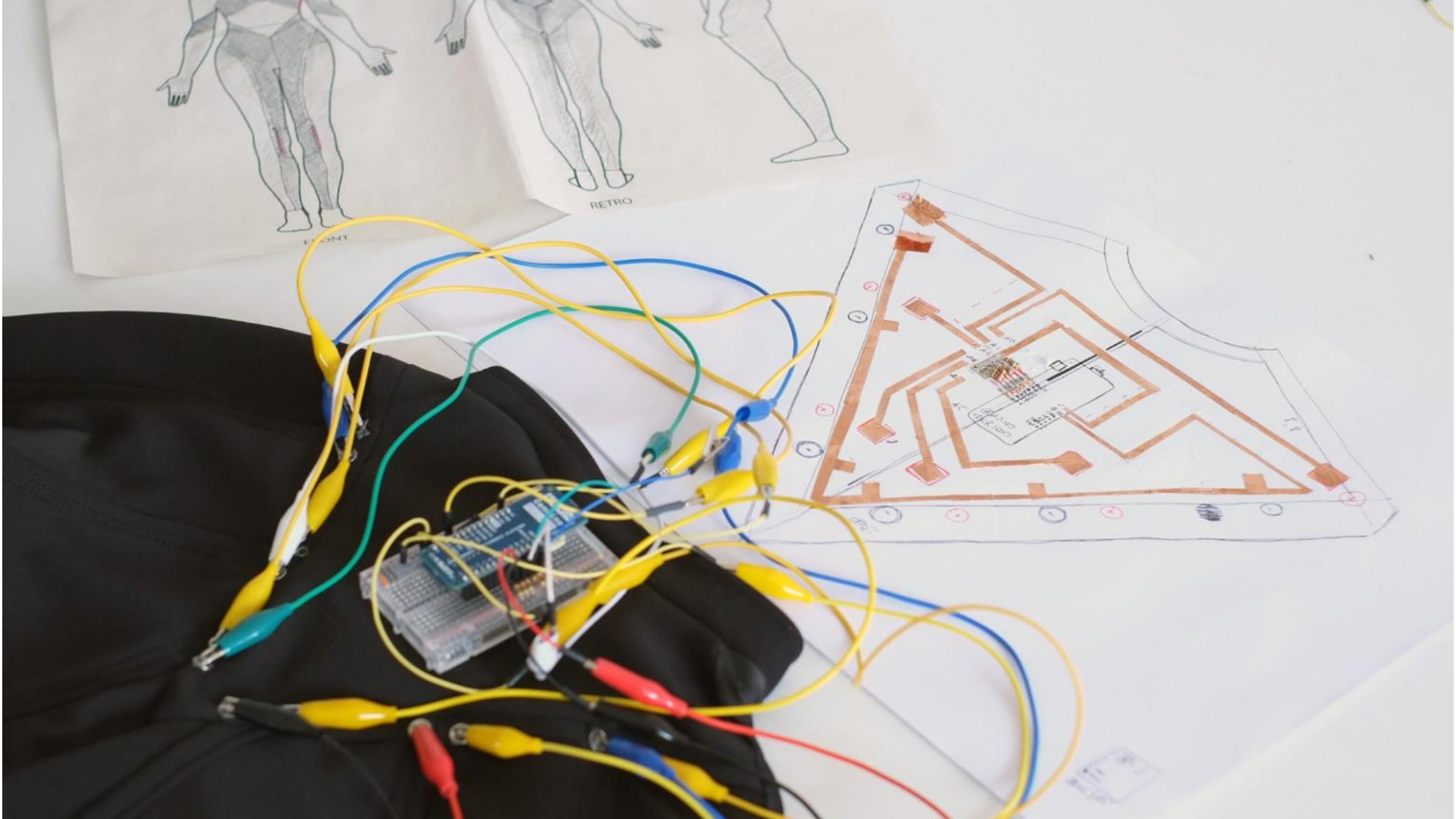
Batuque
Artist : Ricardo Nascimento
Mentorship: FabTextiles

For : Made@eu

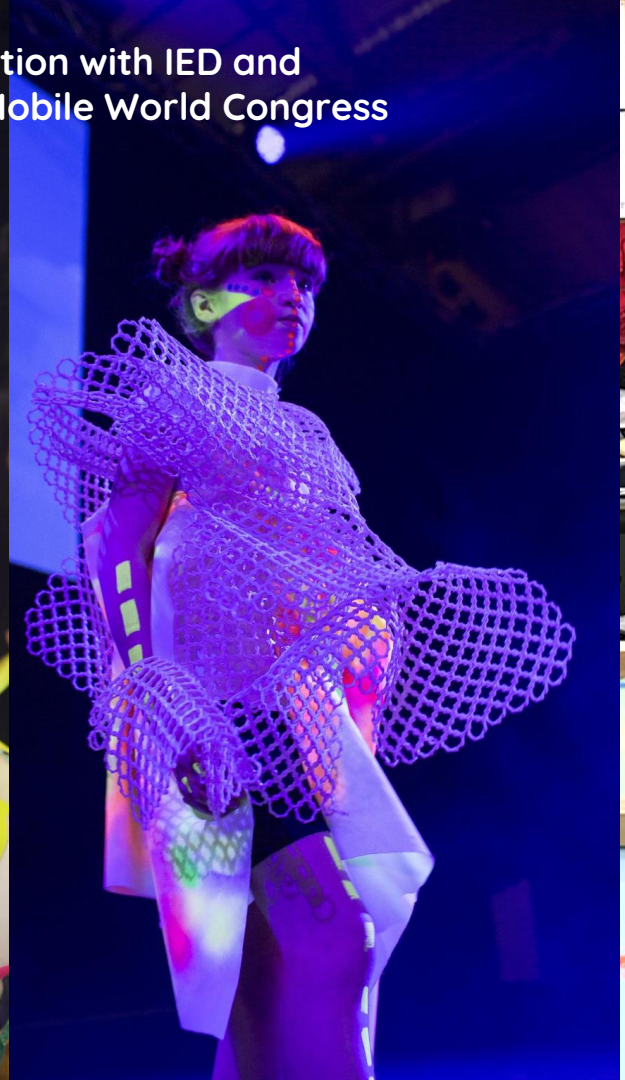
Elastica
Artist: Cristian Rizzuti
Mentorship : FabTextiles

For : Made@eu




RETRO

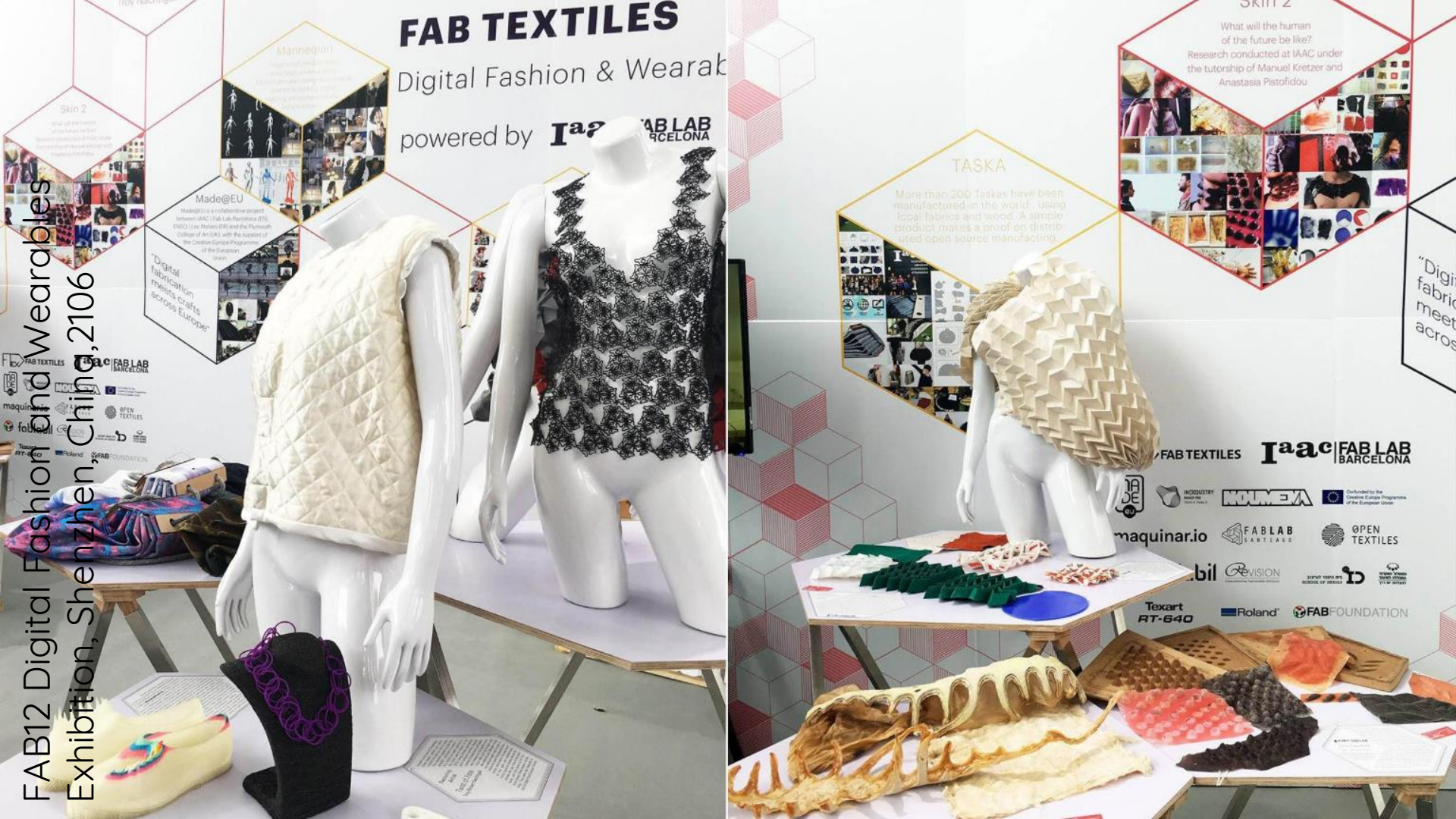
Ecocyborg, in collaboration with IED and
Alex Murray Leslie for Mobile World Congress




002
Fashion Lab

FAB10 Digital Fashion and Wearables
Exhibition, Barcelona, Spain. 2103

FAB11 Digital Fashion and Wearables Exhibition, Boston, USA,2105



FAB12 Digital Fashion and Wearables Exhibition, Shenzhen, China, 2106

FAB13 Digital Fashion and Wearables Exhibition, Santiago, Chile,2017

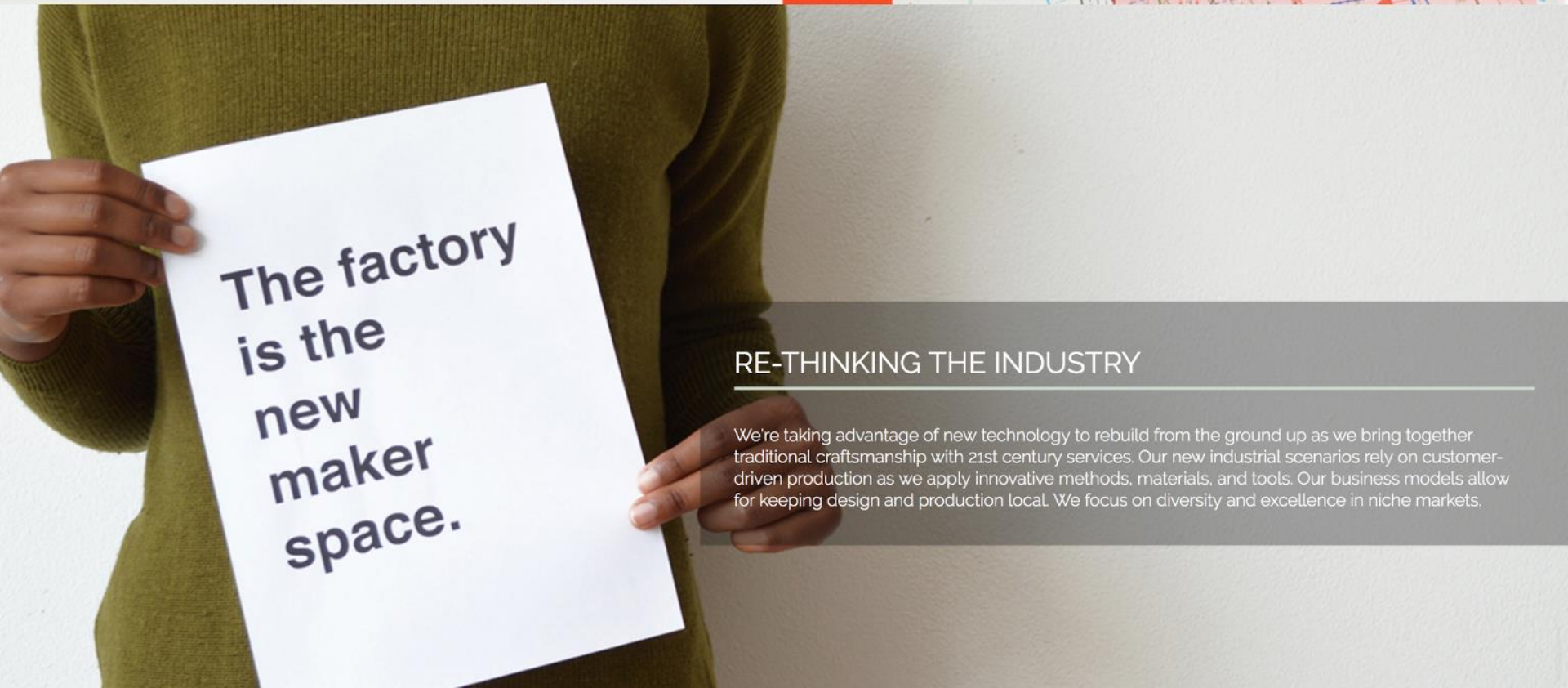
Fab13 Fashion & Assistive Tech Challenge

Coralia
3D printed necklace with laser cut dress
Team : Aldo Sollazzo, Cecilia Raspanti

FAB14 Digital Fashion and Wearables
Exhibition FAB CITY Paris,2018

FAB14 Digital Fashion and Wearables
Exhibition , Toulouse,2018

Textile & Clothing Business Labs



RE-THINKING THE INDUSTRY

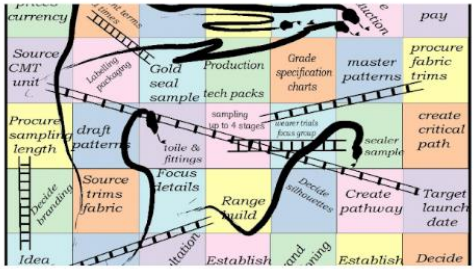
We're taking advantage of new technology to rebuild from the ground up as we bring together traditional craftsmanship with 21st century services. Our new industrial scenarios rely on customer-driven production as we apply innovative methods, materials, and tools. Our business models allow for keeping design and production local. We focus on diversity and excellence in niche markets.

Business Pilots

Natural Fibres

The Natural Fibres business pilot investigates ways in which TCBL can promote sustainable and eco-friendly choices in textile and clothing value chain by concentrating on the use of natural materials.

Short Runs



Short run production can allow for local sourcing closer to market needs, but also presents a number of challenges that can be addressed through TCBL.

BioShades

The textile industry is one of the most polluting in the world; we are trying to identify the environmental costs of dyeing and are researching for less harmful alternatives.

Digital Heritage

Preserving the manufacturing memory of the area and of individual companies contributes to the preservation and transmission of 'know-how' and the enormous wealth of tacit knowledge of a T&C district.

Eco-Friendly Production

The aim of this Business Case is to create an ecosystem covering the entire supply chain: from the fibre down to the final customer.

Independents

Empowering designer / producers Perhaps they consider it a temporary activity, waiting to be absorbed by a "Big brand"; perhaps they just escaped from a "Big brand". Maybe some were simply homesick and prefer a familiar clientele in the same town where they were born. The...

FABRICADEMY | Textile & Technology Academy
academy.org | textile-academy.org

info@textile-

A journey at the intersection between textiles, soft fabrication and biology

FABRICADEMY
a new textile academy

3rd year : SEPTEMBER 25, 2019

Iaac | FAB LAB BARCELONA
FABTEXTILES
waag technology & society
waag textilelab amsterdam
Academany The Academy of (almost) Anything

info@textile-

Fabricademy is a transdisciplinary course that focuses on the development of new technologies applied in the textile industry, in its broad range of applications, from the new sustainable biomaterials to the upcoming wearable market.

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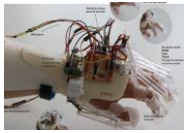
CLASSES

13 WEEKS of intensive learning

State of the Art
WEEK 1

Bio Fabricating Dyes & fabrics
WEEK 4

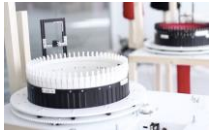
Textile as Scaffold
WEEK 7



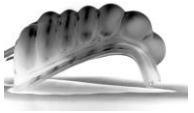
Implications and Applications
WEEK 10

Digital Bodies
WEEK 2

E-Textiles and Wearables I
WEEK 5



Open Source Hardware
WEEK 8



Soft Robotics
WEEK 11

Circular Open Source Fashion
WEEK 3

Computational Couture
WEEK 6

E-Textiles and Wearables II
WEEK 9

Skin Electronics
WEEK 12

FACULTY

Anastasia Pistofidou

FABTEXTILES, IAAC
FAB LAB BARCELONA

Cecilia Raspanti

TEXTILELAB AMSTERDAM
WAAG SOCIETY

Zoe Romano

WE MAKE, MILAN

Katia Vega

SOLUCIONES RACIONALES

Oscar Tomico

ELISAVA,
BARCELONA

Aldo Sollazzo

NOUMENA, RESHAPE,
IAAC BARCELONA

Liza Stark

softcircuiter

Dr. Lily Chambers

RHINE-WAAL
UNIVERSITY

Adrianna Cabrera

FabLab Kamp
Lintfort

Varvara & Mar Canet

MAR CANET & VARVARA
GULJAJEVA ARTIST DUO

Fiore Basile

Fabctory

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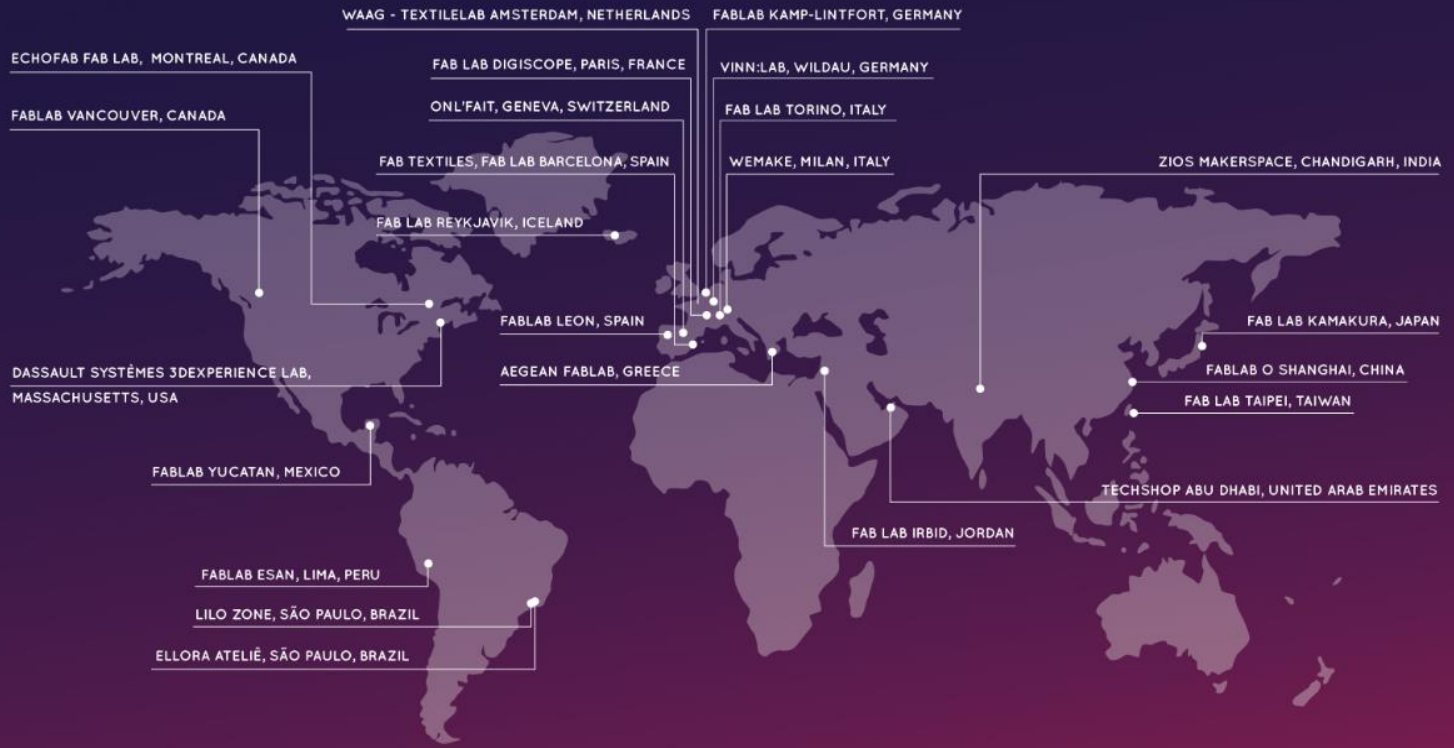
Local & Global



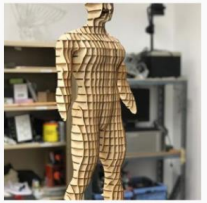
¨The future is here, it's just not widely distributed yet.¨

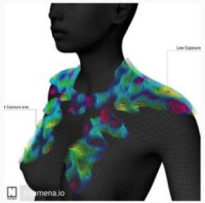
William Gibson (1948)

Canadian science fiction author introduced the term ¨cyberspace¨

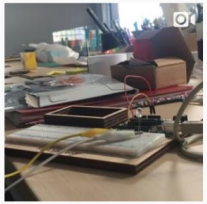














Instagram
#fabricademy