BAP
THE BITS AND ATOMS PEN

Who am I?

Industrial Designer

Frustrations +
Creativity +
S. Development +

Arts and Science

4 years
in Network

FabAcademy 2016
BioAcademy 2016
Grow With Fab 2018 - 2019

What I?

Region

FabLat TV / FABLAT
LAT Pavilion / FAB13

Fab Latinamerica

Local

Yachay / Public - Political
ZOI / Company - Cooperative

Fab Lab Ecuador

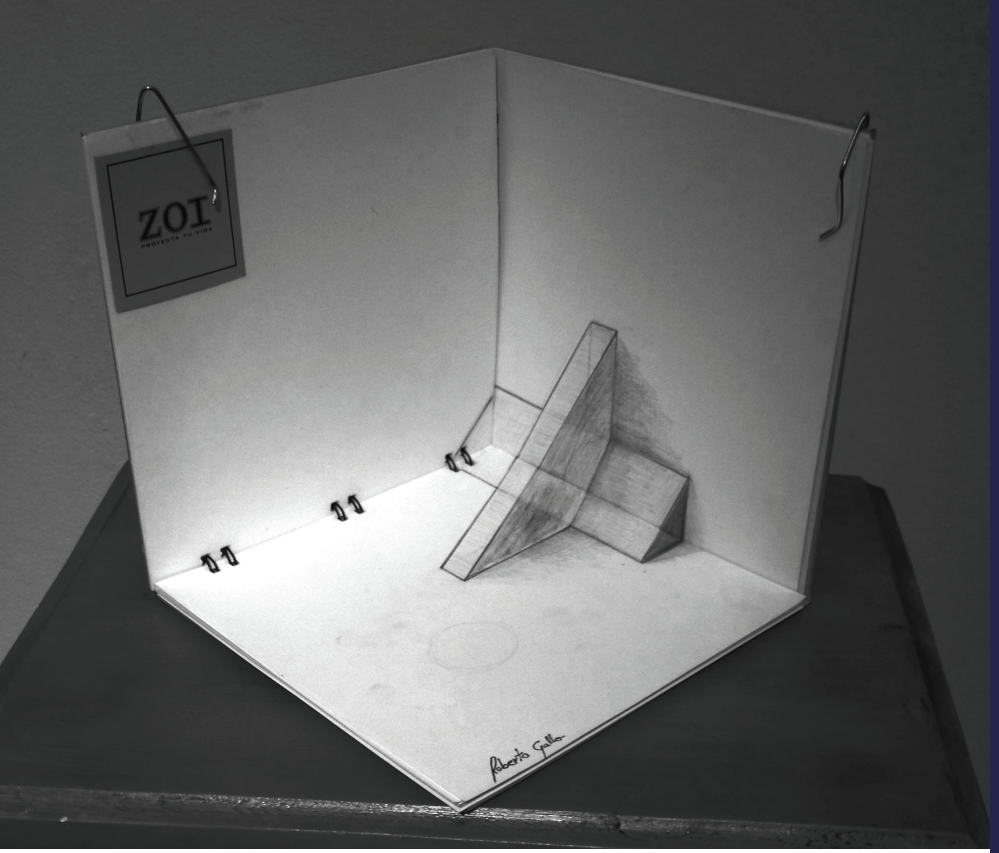
What I´m ...

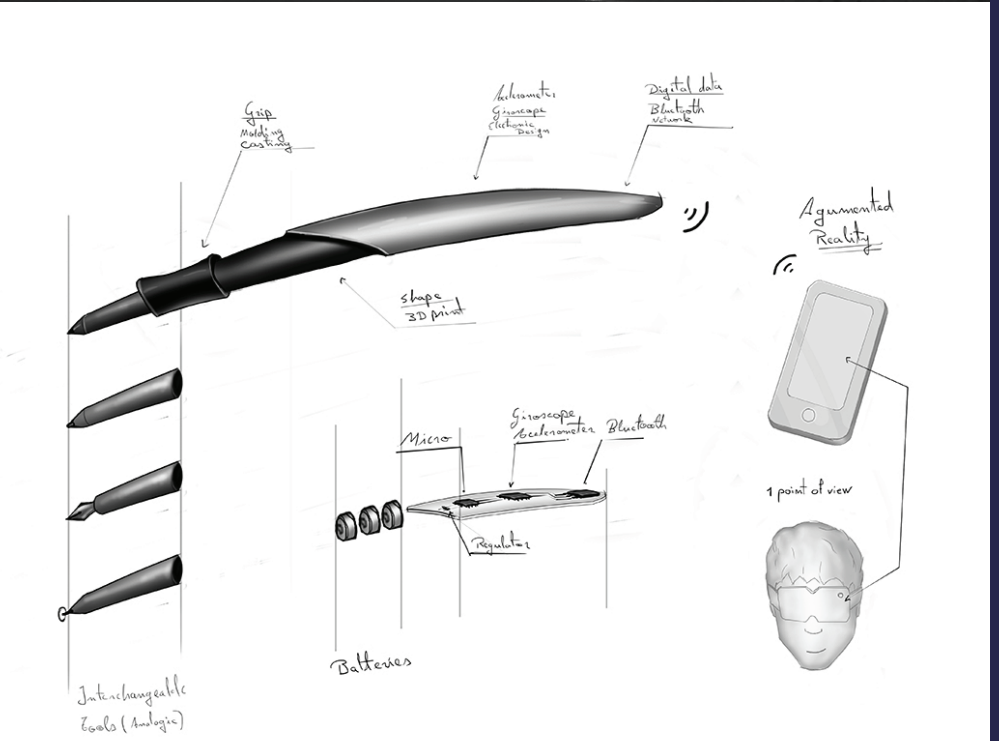
FabLab ZOI

Directing

Improving

Bits and Atoms Pen



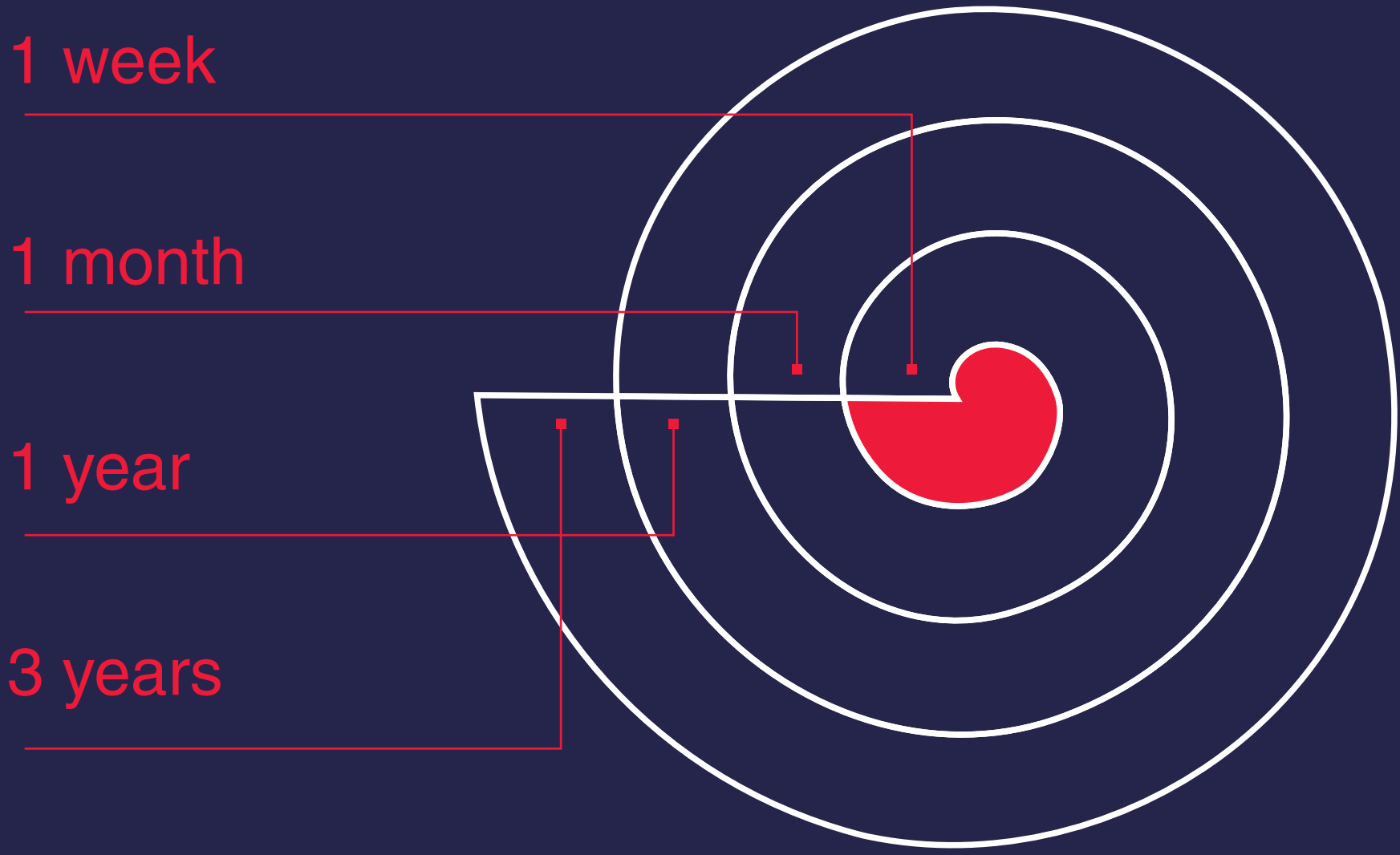


Frustrations

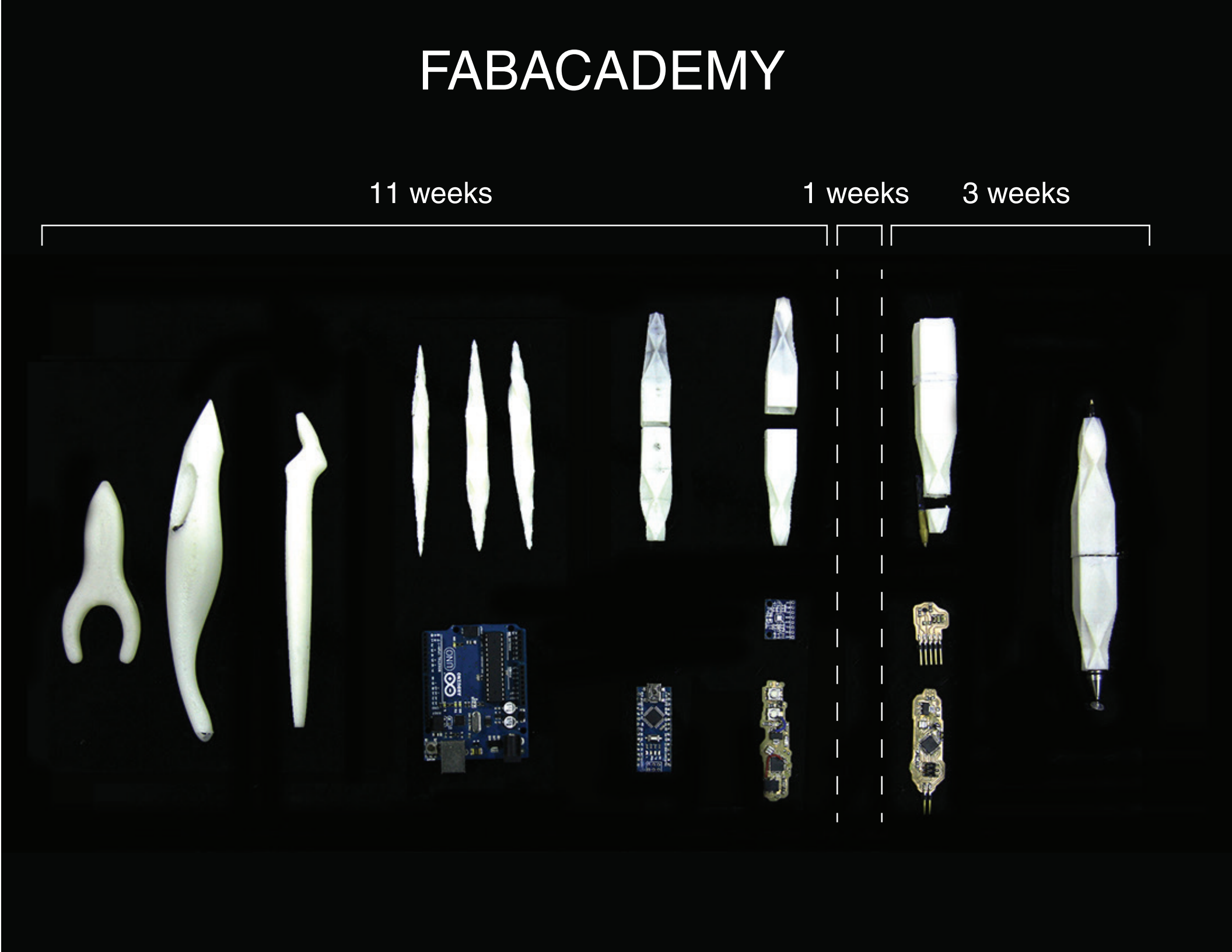
"comunicate 3D ideas"

"Adapt machines to people not people to machines"

Spiral Development



FABACADEMY



BAP

THE BITS AND ATOMS PEN

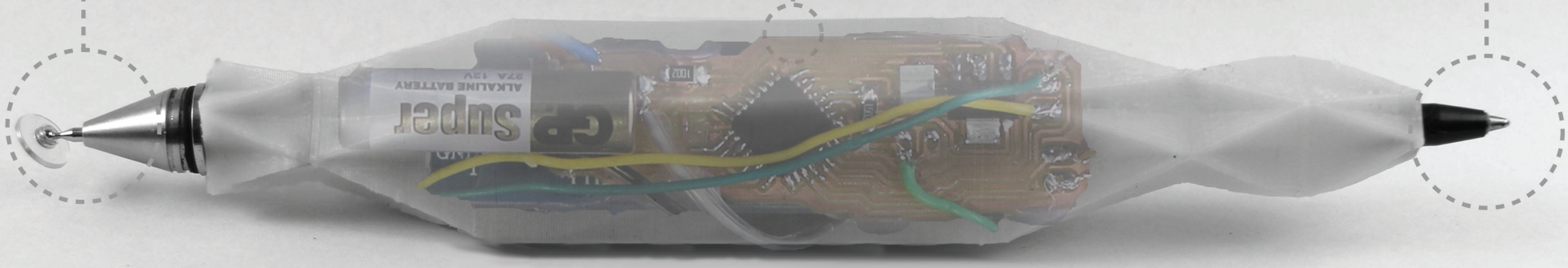
BAP is a complete tool to express, design and fabricate your ideas. It's inspired in "Bits and Atoms" concept and ergonomics. It's designed to brings an intuitive interface between humans and technology and all the benefits of digital fabrication. It has three main features to manipulate digital and physical world.

by Roberto Gallo

BITS
NIB

SPATIAL
DRAWER

ATOMS
NIB



BITS NIB allows you to interact with touch screen digital devices with really good precision.

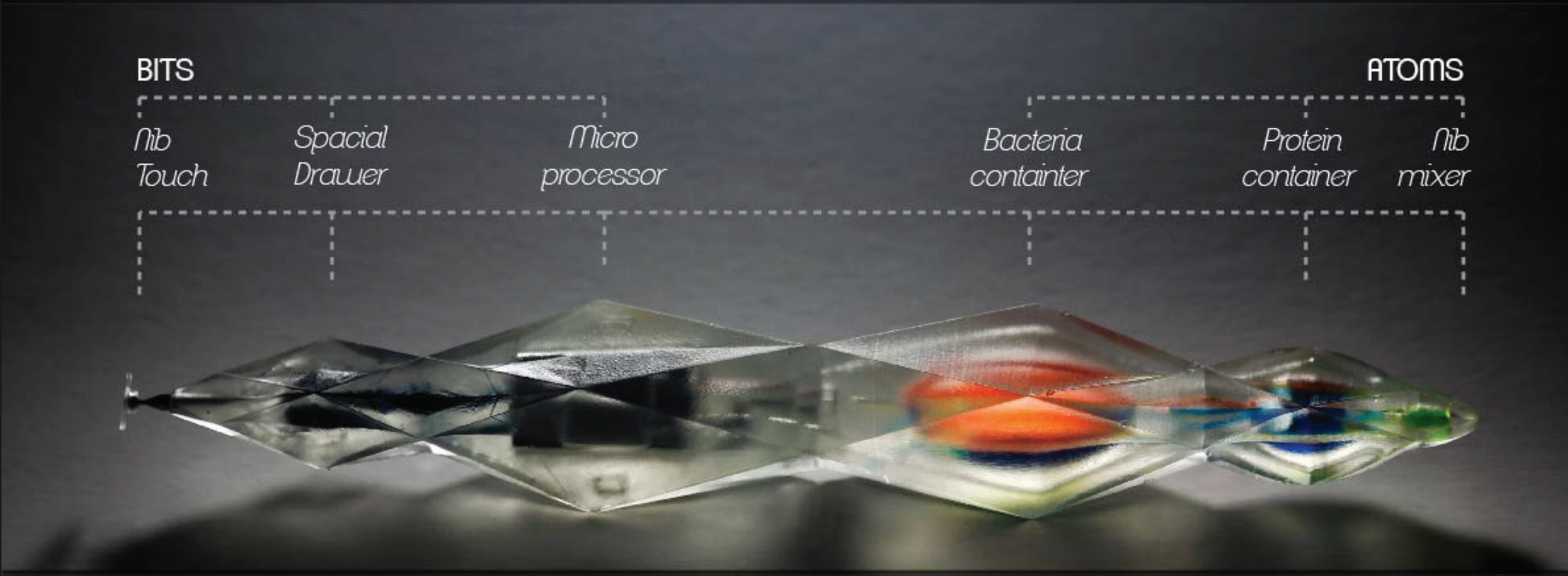
SPATIAL DRAWER integrate a 3D tracking sensor and Bluetooth module that let you draw digitally in 3D and convert them into Gcode in order to control diferent digital fabrication machines.

ATOMS NIB is one of the most common tools that almost everyone uses to communicate ideas and express themselve.

BAP

THE BITS AND ATOMS PEN

by Roberto Gallo

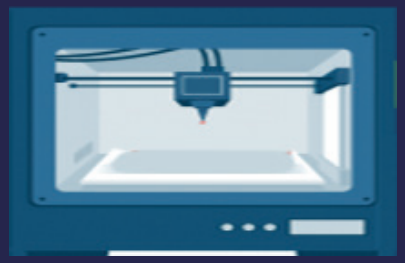


BAP is a complete tool to express, design and fabricate your ideas. It's inspired in "Bits and Atoms" concept, ergonomics and Nephila Clavipes spider. It's designed to brings an intuitive interface between humans and technology and all the benefits of digital fabrication and bio fabrication. This pen has the ability to generate its own ink thanks to bacerias that keep alive inside it. Also its microprocessor allows to generate any color by precisely mixing primary color inks produced by its bacteria. At the same time it generates information of its movement and mixtures of materials that allows you to work simultaneously with "bits and atoms".

2017

+ Working prototype
+ Draw vectors
+ Bluetooh 0.4

- Non real-time
- Difficult to use
- Battery problems

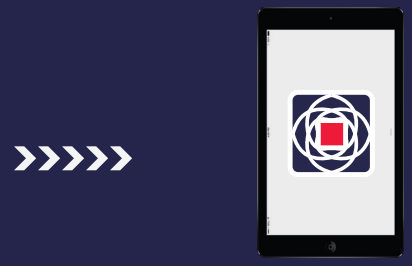


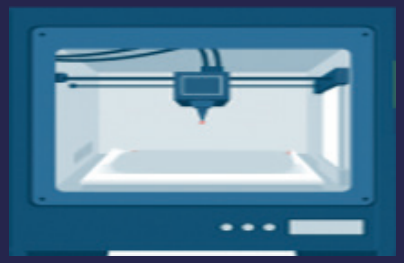
User Computer CNC

2018
(Grow with Fab)

+ App working
+ Easier to handle
+ Research

+ Battery solved
- Delay
- Compatibility





User

Smart Device

CNC

2019 (Grow with Fab)

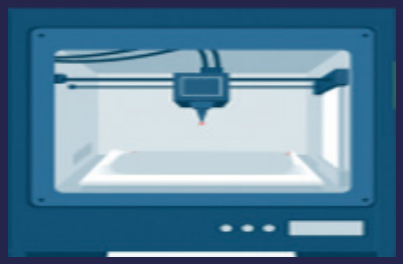
+ Intuitive
+ Low level prog

+ Real -Time
+ Easy to use
- Scale

User

Digital
Switch

Computer



CNC

It will be launched at...

Conclusions

1.- Spiral Development is the best tool

2.- Find the starting spiral is crucial

3.- Machines need to be adapted to people