

DIGITAL FABRICATION, WEARABLE DESIGNS, + OVERSEAS PARTNERSHIPS

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UW-STOUT (INDUSTRIAL DESIGN)



**NUST MISiS
(MASTERS in DIGITAL FABRICATION)**



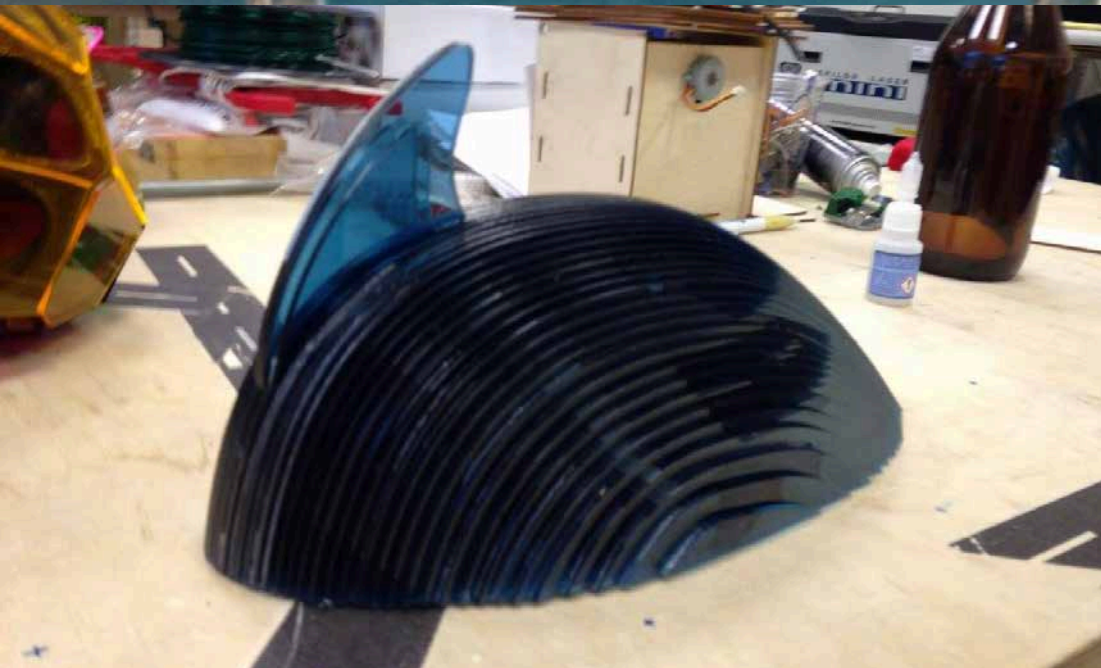
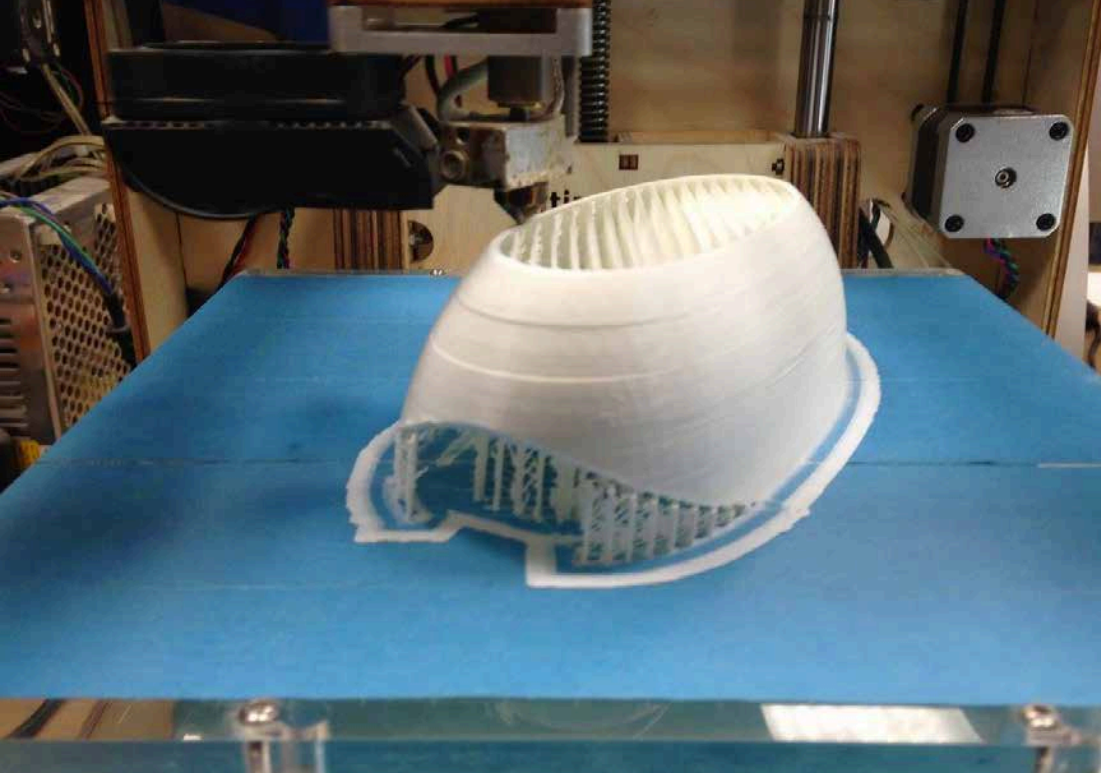


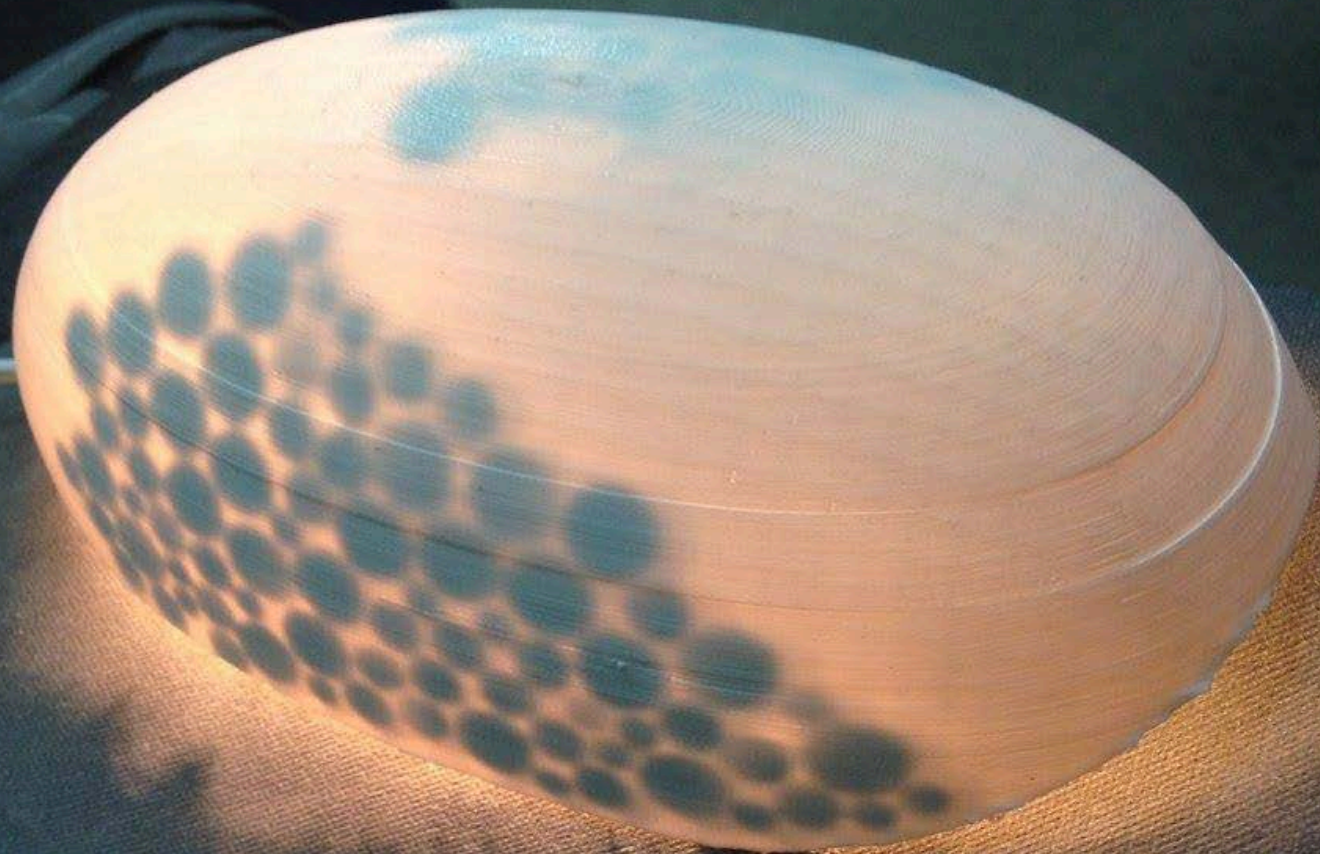


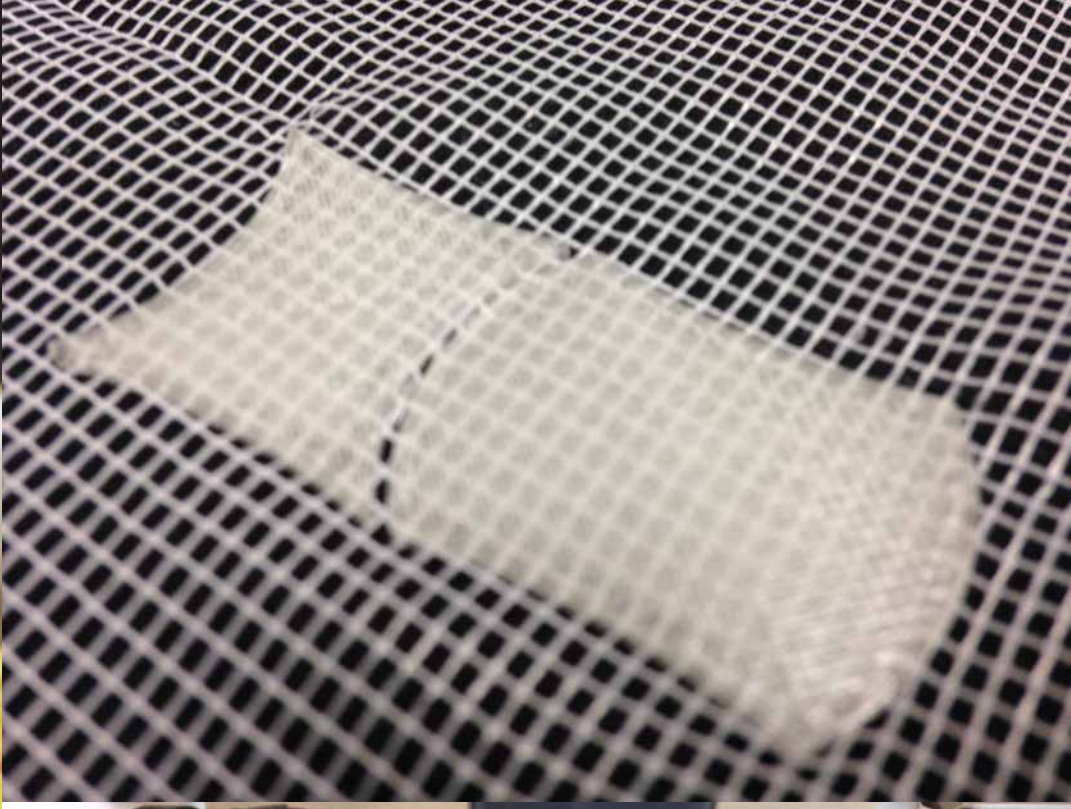
IDEATION + CONCEPT DEVELOPMENT



**MAKE + REPEAT
TO SUCCEED**











TWO WEEKS
[WEARABLES]

WEARABLES
CONSPIQUITY



Goals for students to learn the following.....

Learn the **design process**

Learn to **code**

Learn to **create electronics**

RESEARCH

CREATE A PRESENTATION:

COLLECT **OBSERVATIONS**

CREATE A **USER TASK ANALYSIS**

USER TREND BOARD

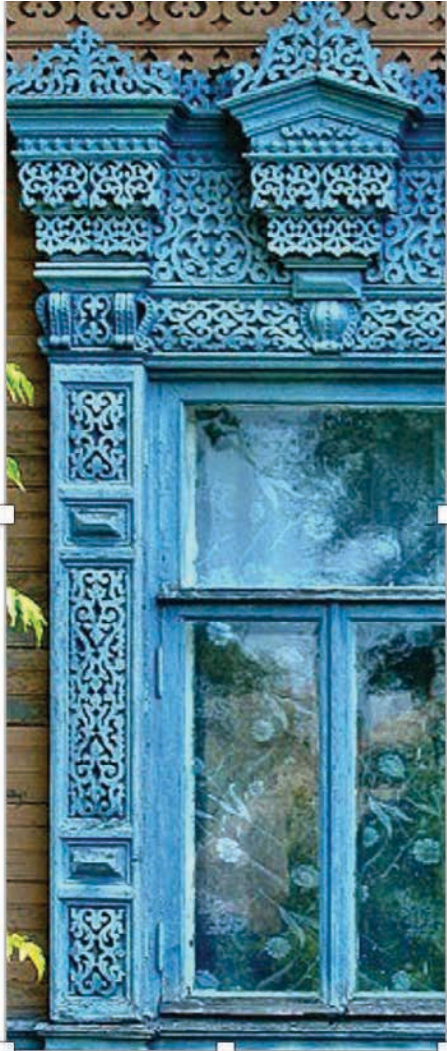
VISUAL INSPIRATION BOARDS

DEFINE **DESIGN IMPLICATIONS**

RESEARCH

CREATE
**IMAGE
BOARDS**

DEFINE
**YOUR VISUAL
INSPIRATIONS**



RESEARCH

CREATE A
***USER TREND
BOARD***

*DEFINE YOUR
USER WITH
IMAGES +
TEXT.*



URBAN HIPSTER

Electrical Engineer
Loves american fusion,
retro trends, loves color
and texture, watches local
bands at first avenue...



RESEARCH

CREATE A **USER TASK ANALYSIS** REFERENCE EXAMPLE

DEFINE user - task - environment

TASK

- What is the task?
- What defines that task?
- What is the action involved with that task?



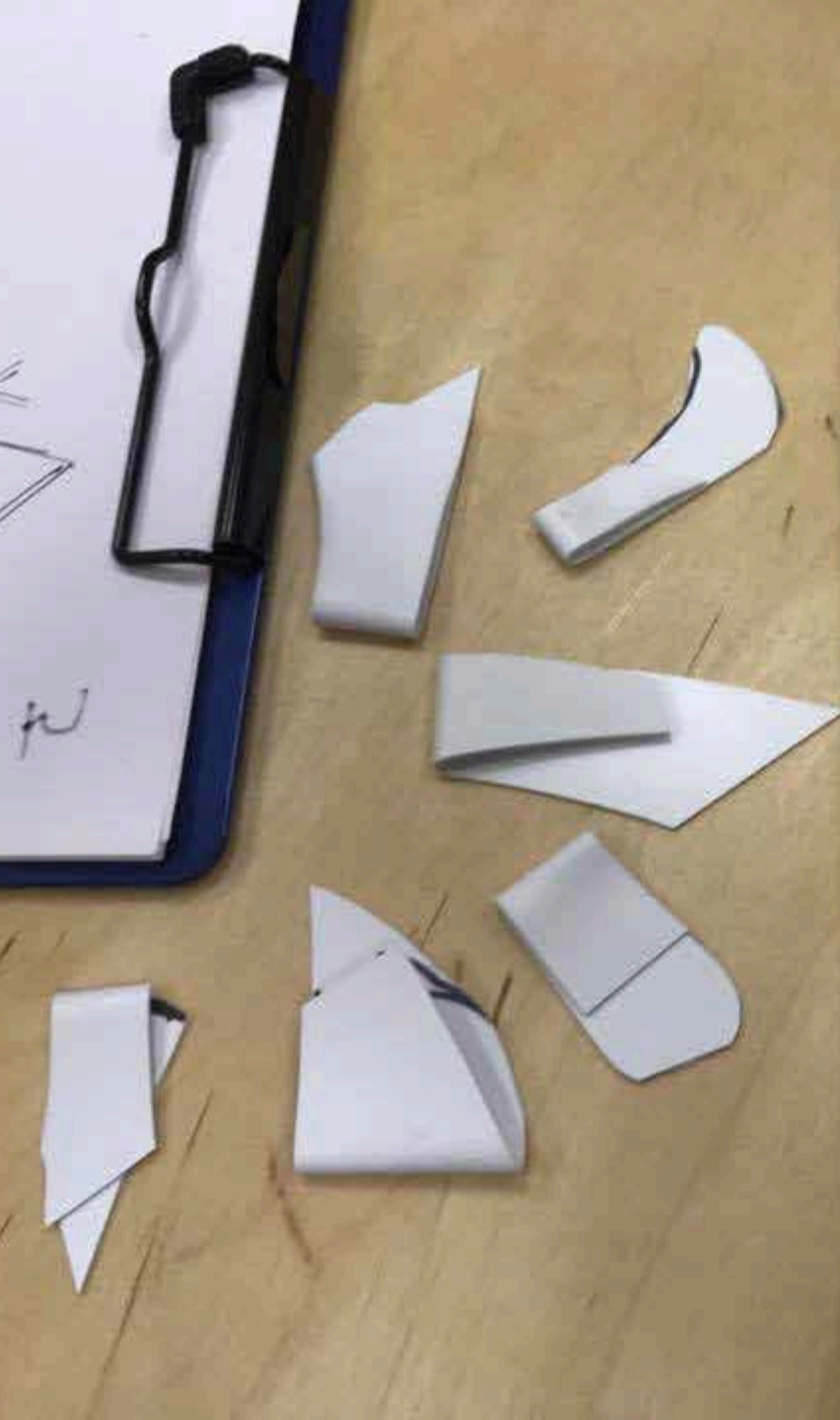
USER

- Who is the User?
- Tween girl, age 12

ENVIRONMENT

- What is the environment?
- What is in the environment?
- Bathroom
- Toilet, Sink

DESIGN IMPLICATION:
DESIGN NEEDS TO HAVE A SLIP-PROOF GRIP.



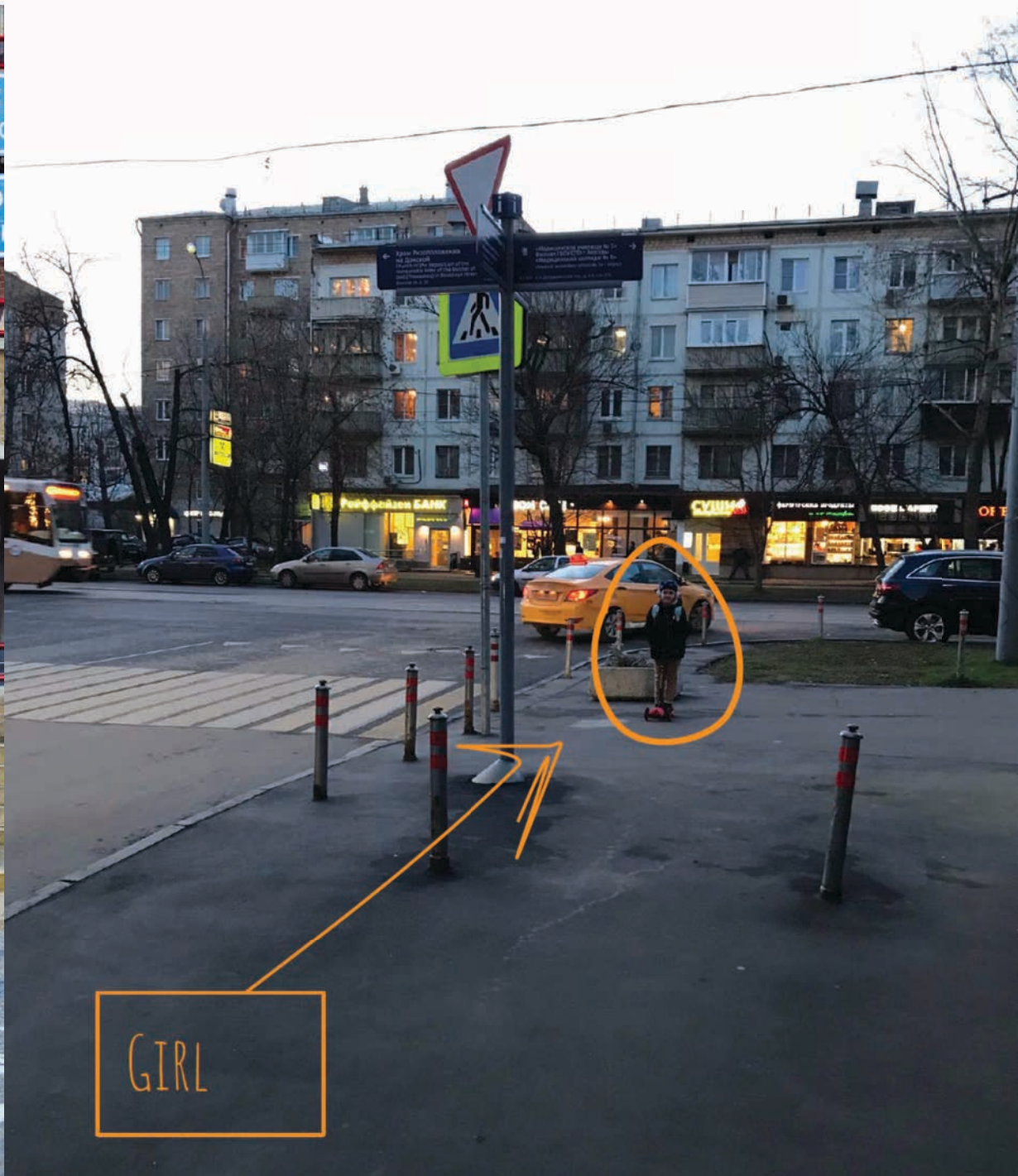
Goals for the project were the following.....

Design and engineer within 2 weeks.
to **research** a problem, **design** the form
while **creating** code and the electronics.

LOW LIGHT CONDITIONS

PEOPLE BLEND IN WITH
THEIR SURROUNDINGS.







What emerges

Goals for students to learn the following.....

Learn the **design process**

Learn to code

Learn to create electronics

To design visually interesting objects

Collaborate

Gain confidence



What emerges

Goals for students to learn the following.....

Learn the **design process (use digital fabrication)**

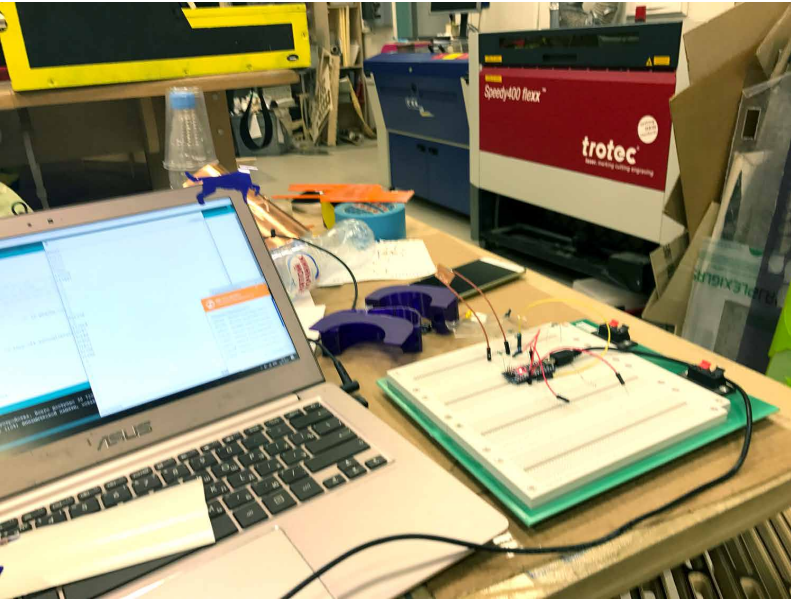
Learn to code

Learn to create electronics

To design visually interesting objects

Collaborate

Gain confidence



What emerges

Goals for students to learn the following.....

Learn the design process

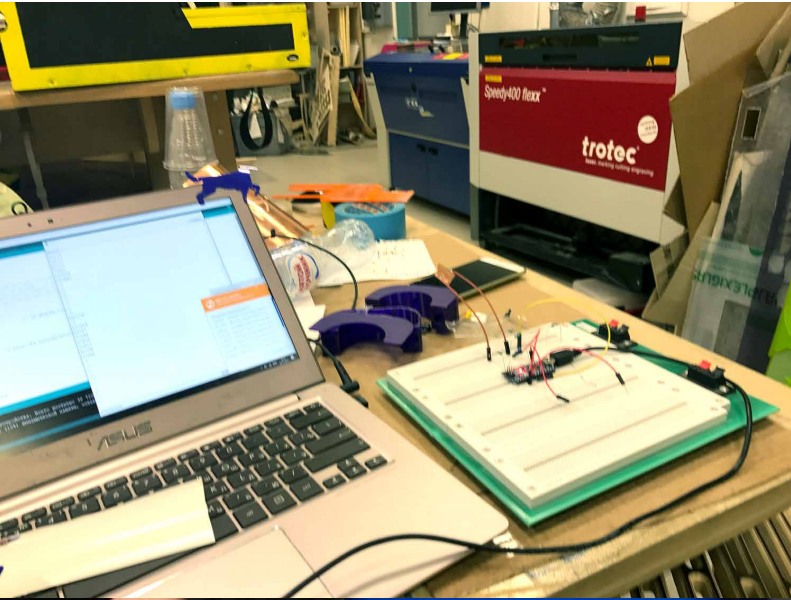
Learn to **code**

Learn to create electronics

To design visually interesting objects

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What emerges

Goals for students to learn the following.....

Learn the design process

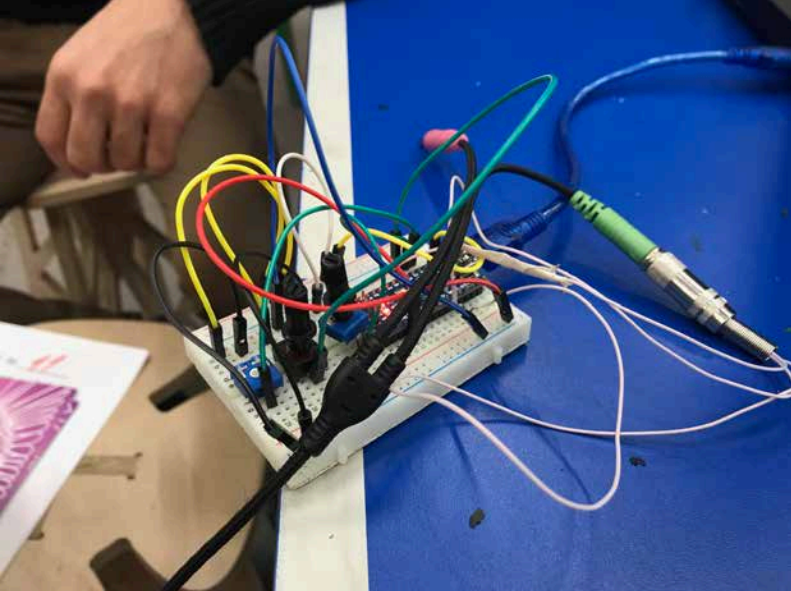
Learn to code

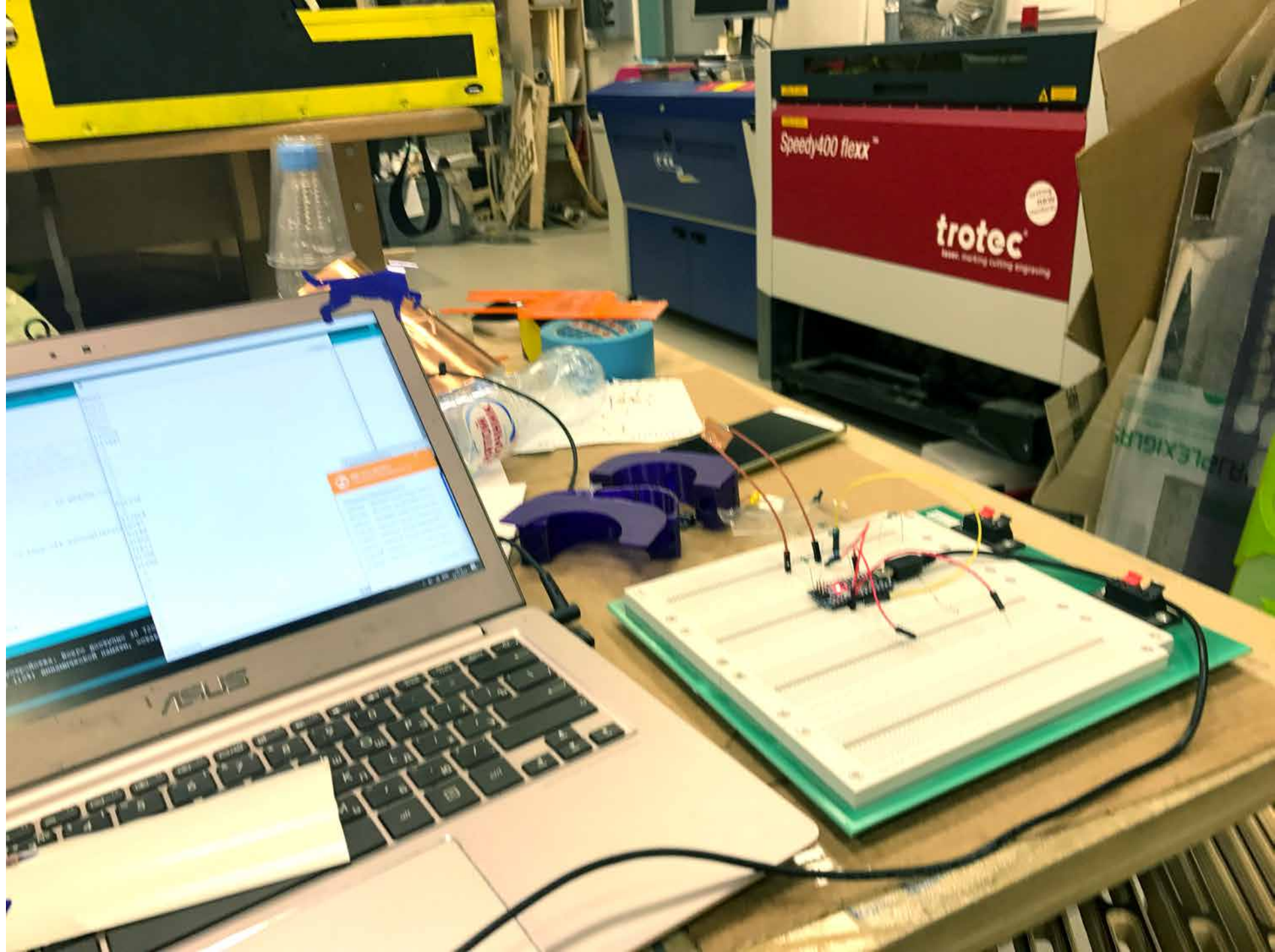
Learn to create **electronics**

To design visually interesting objects

Collaborate

Gain confidence







What emerges

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To design visually interesting **objects**

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Learn to create electronics

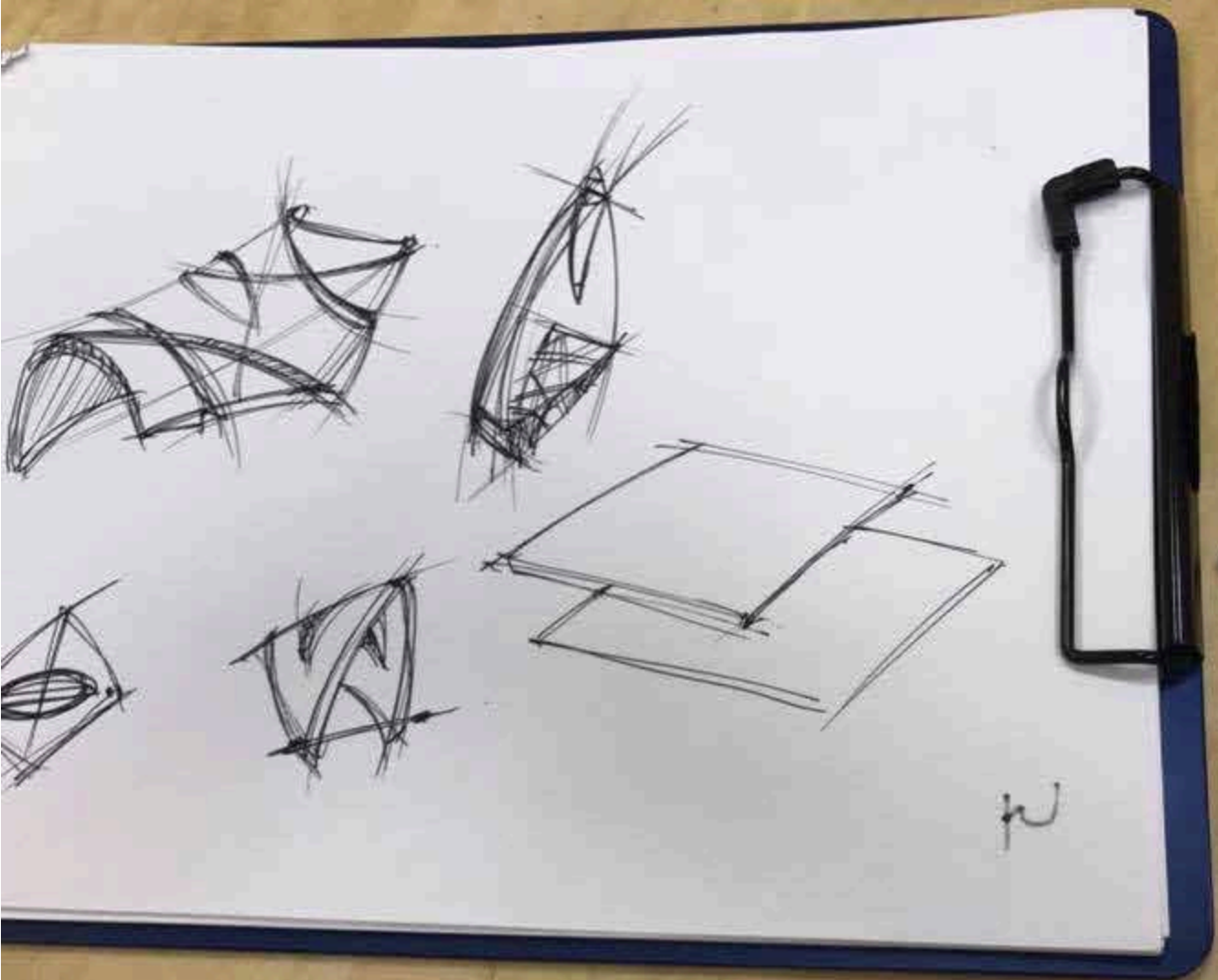
To design visually interesting objects

Collaborate

Gain confidence

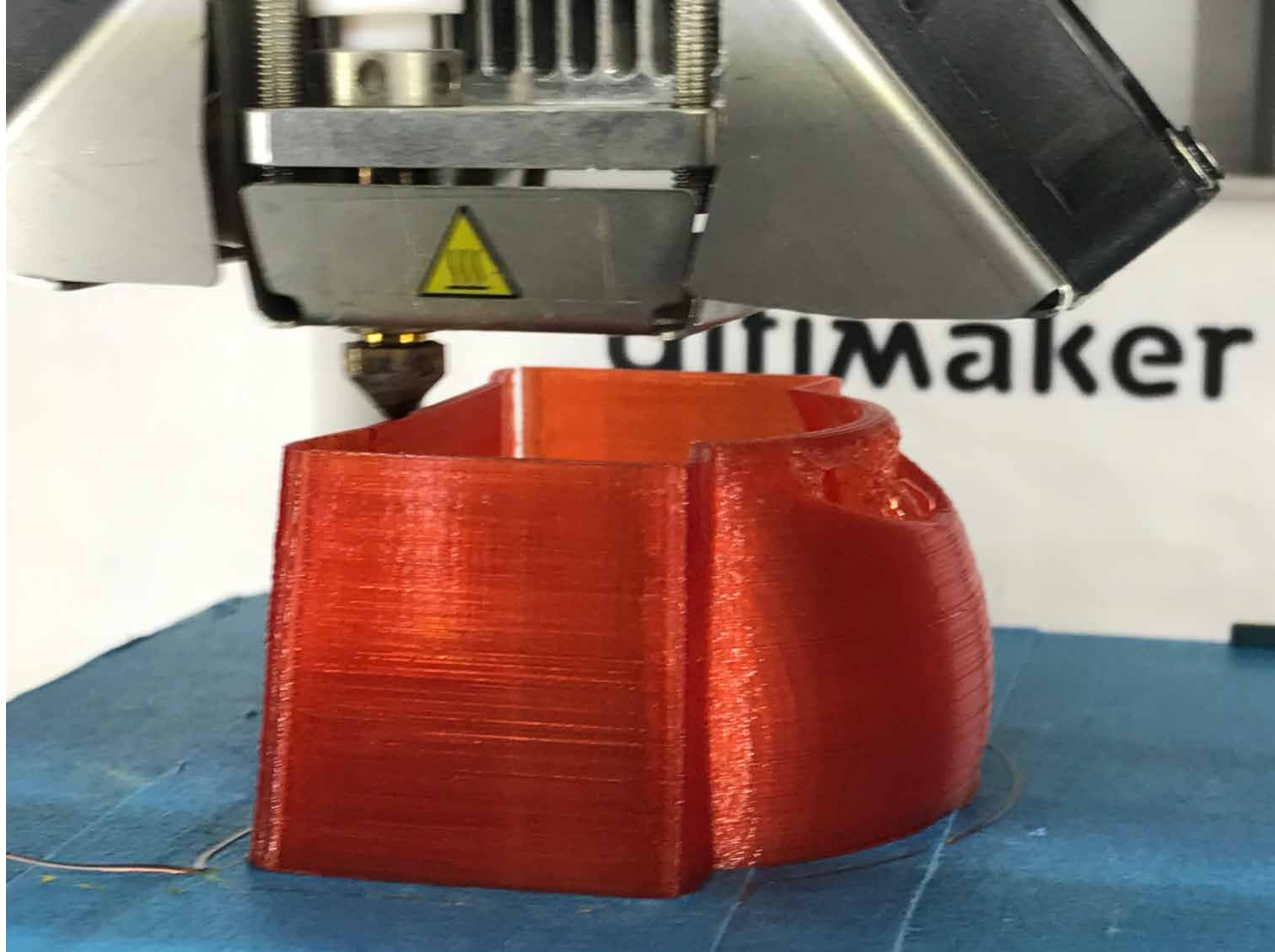
PROCESS

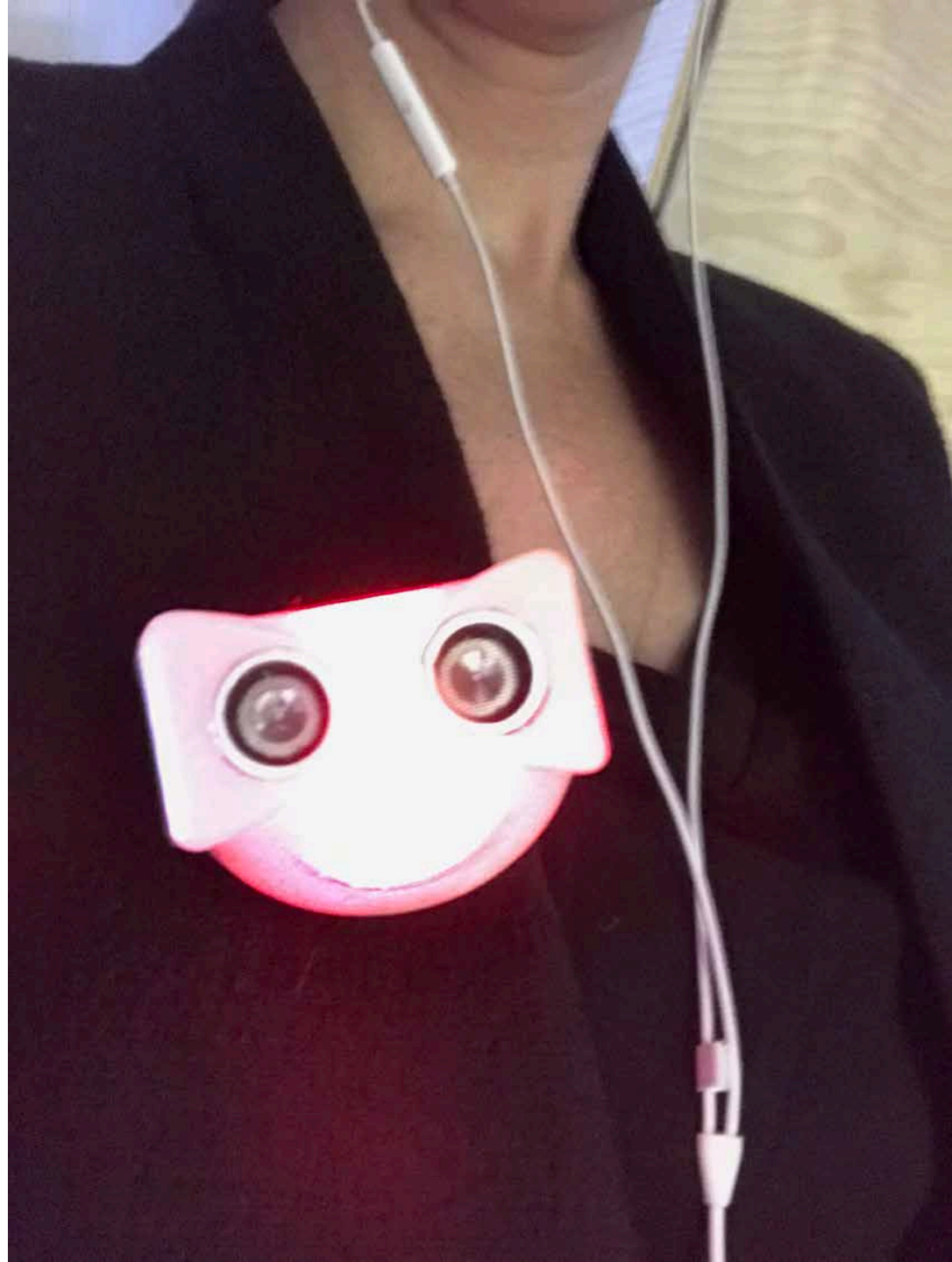
[ITERATION]











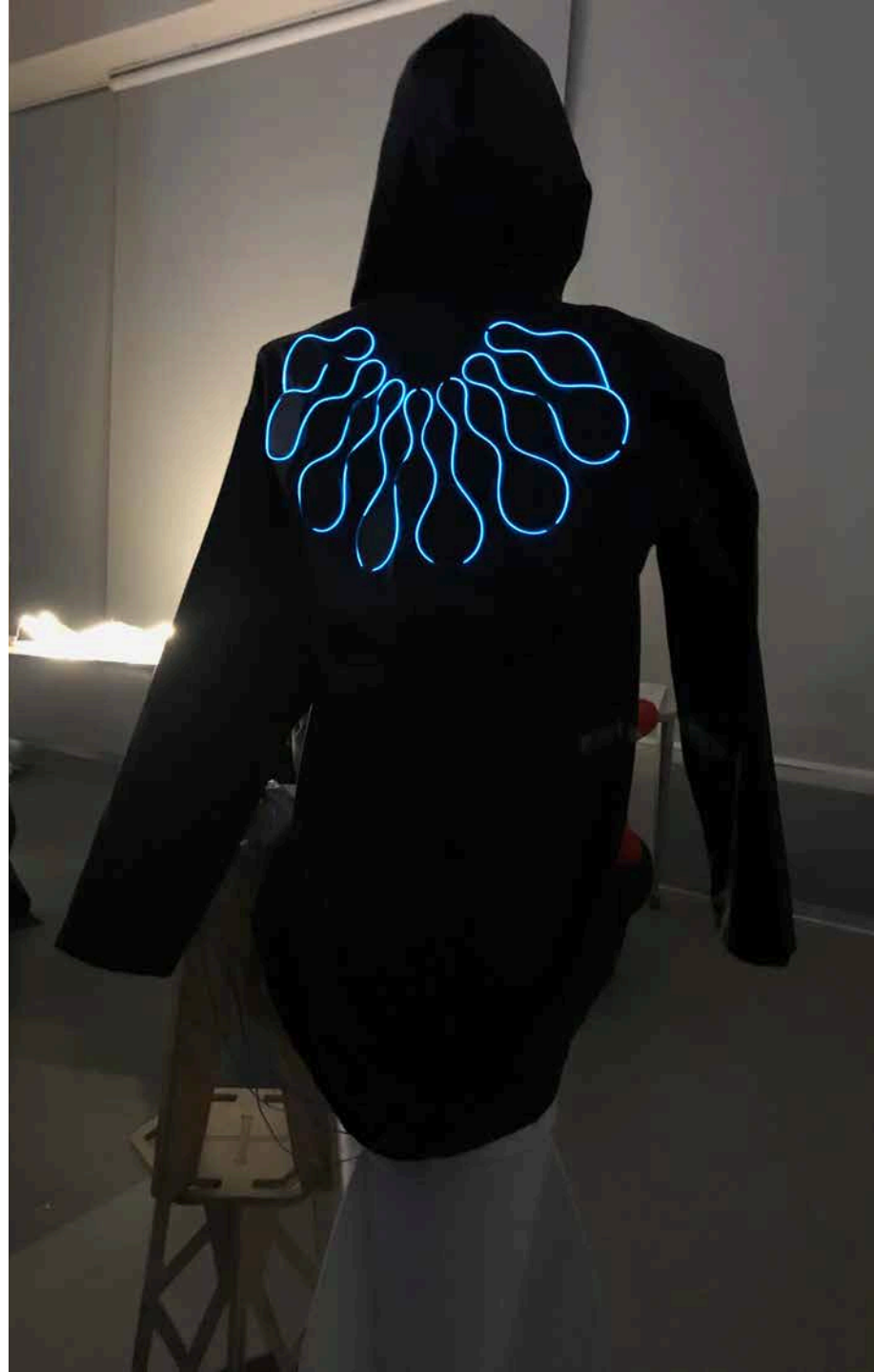
**IT LIGHTS BY A
PROXIMITY
SENSOR!**

STUDENT RESULTS



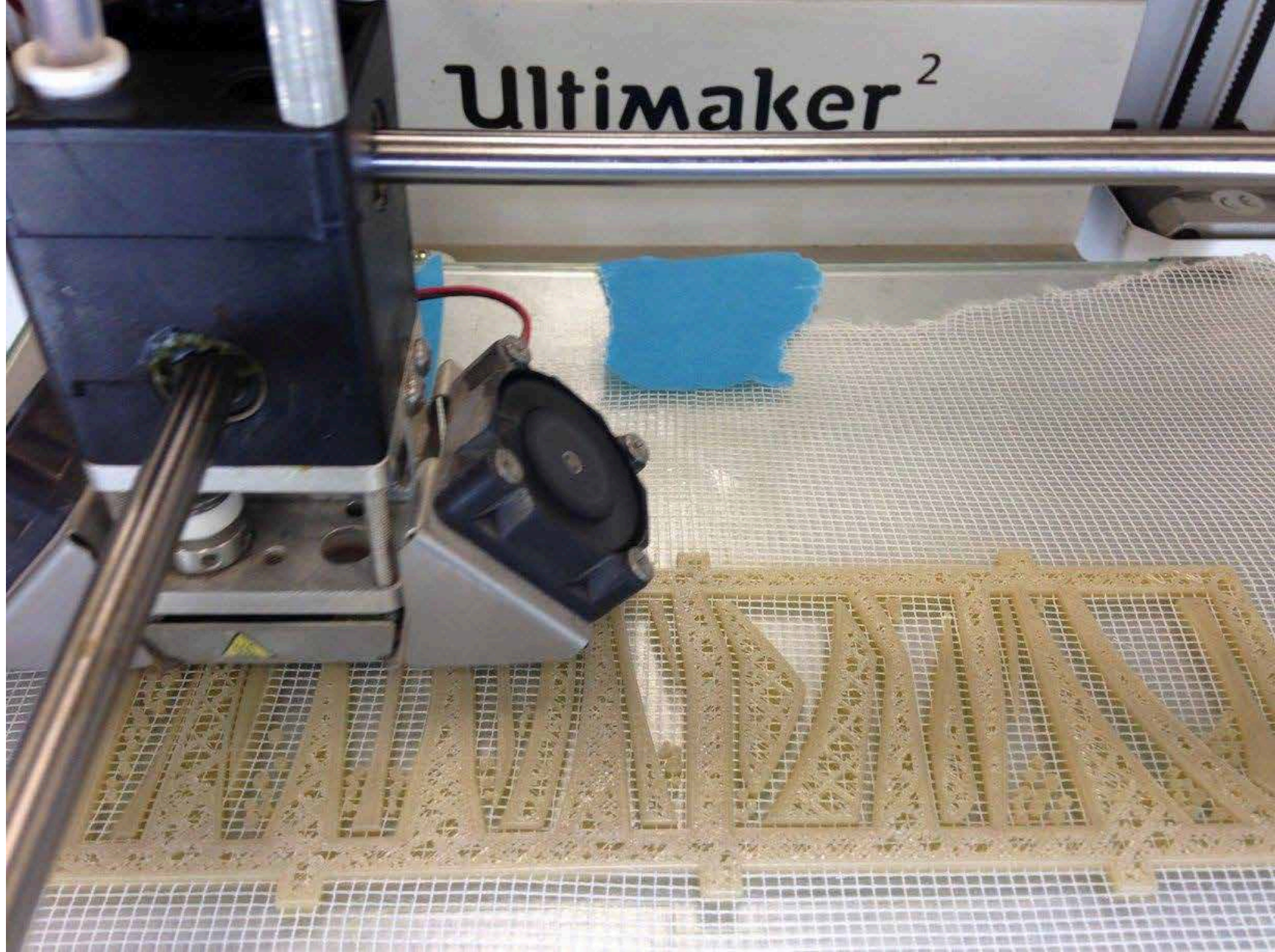


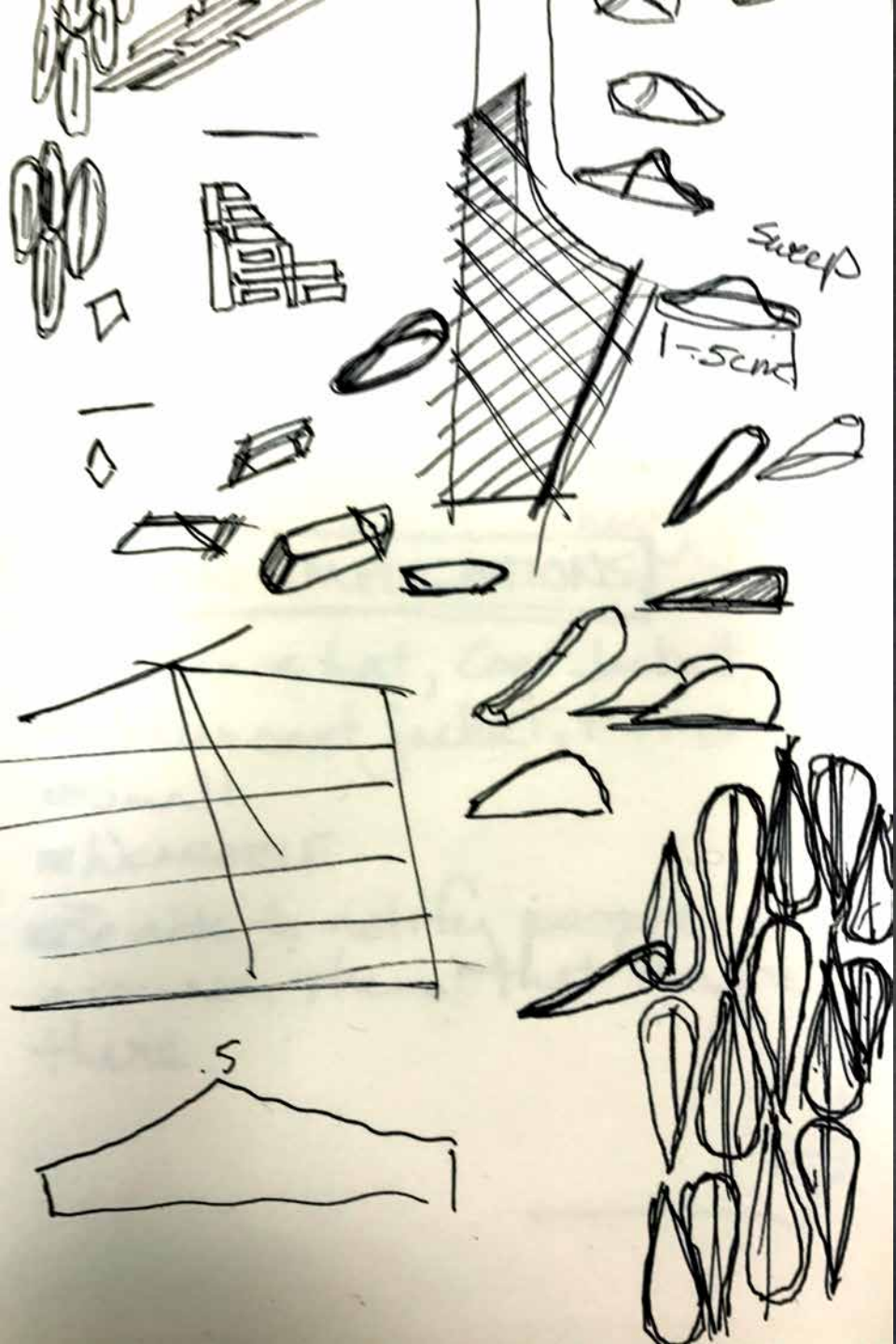


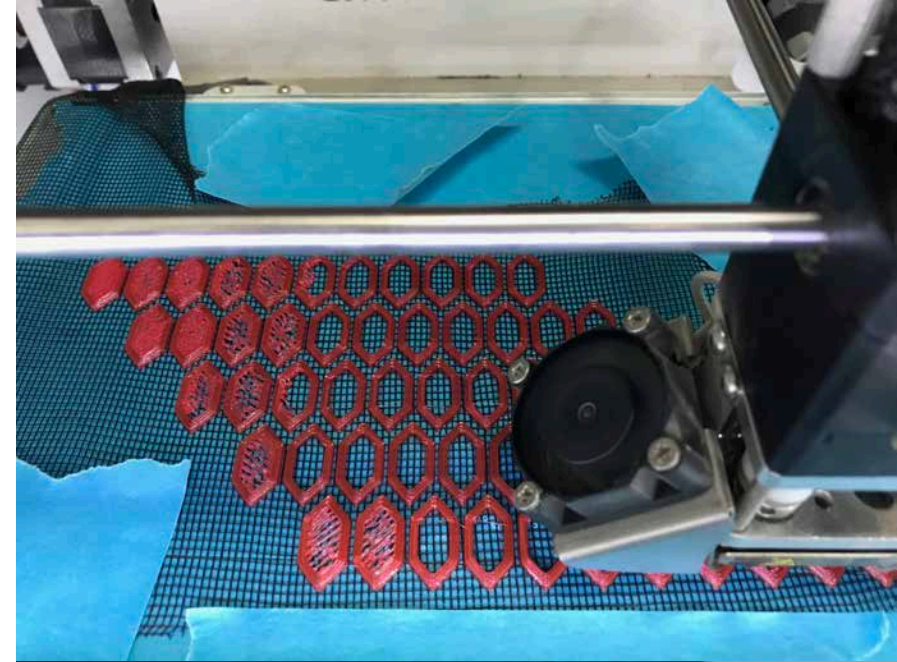


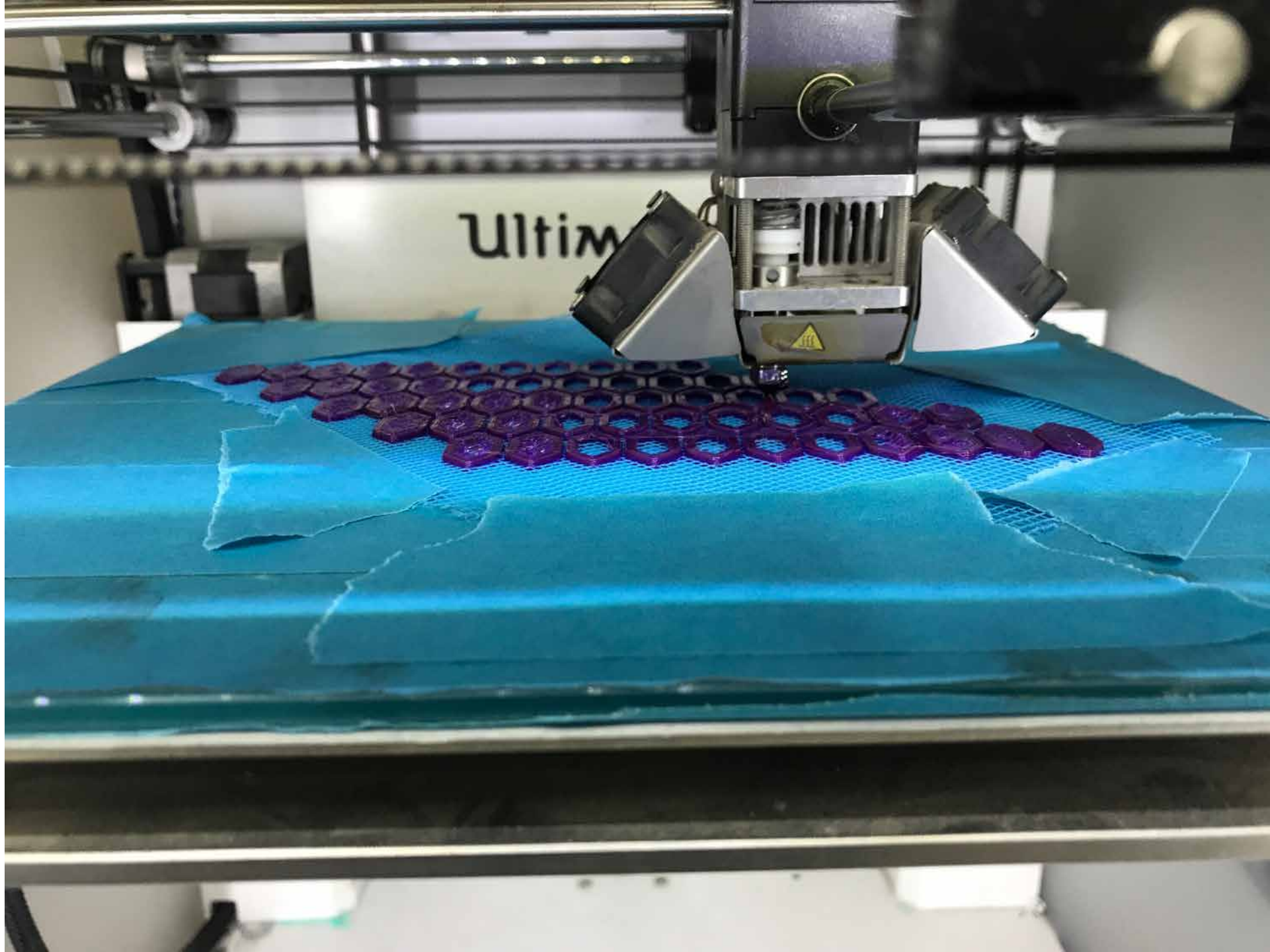
PRINTING ON FABRIC

Ultimaker²







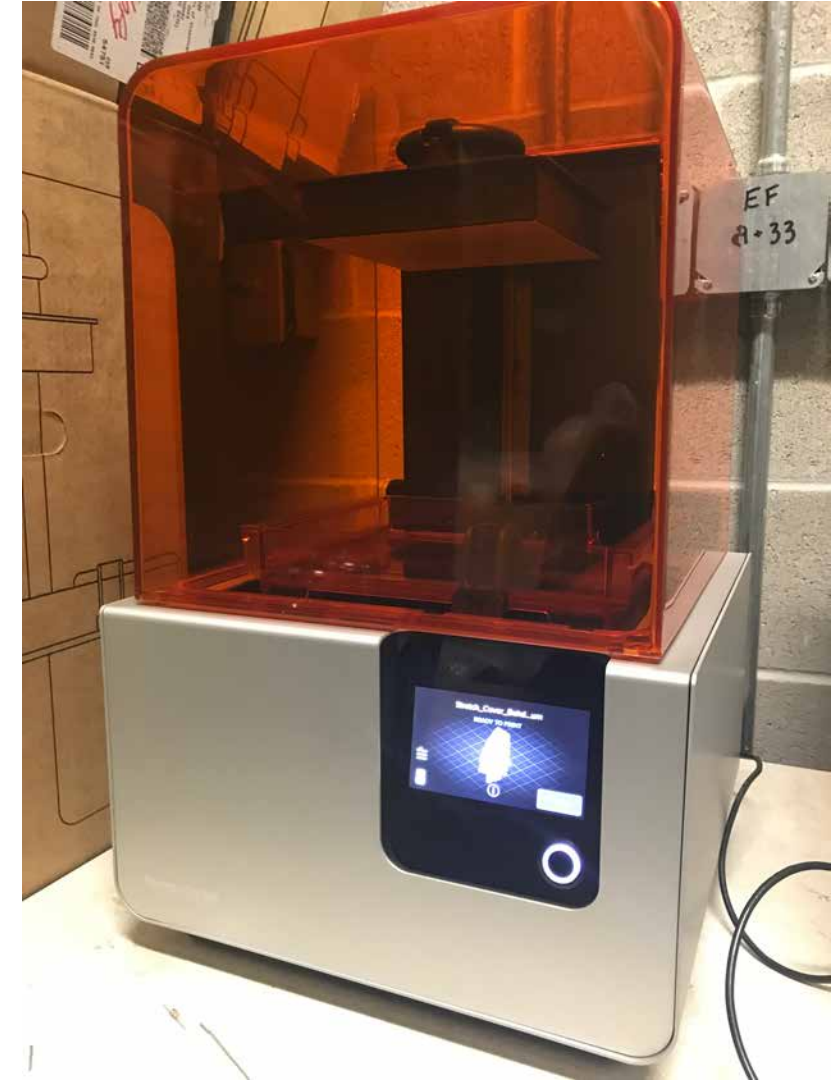
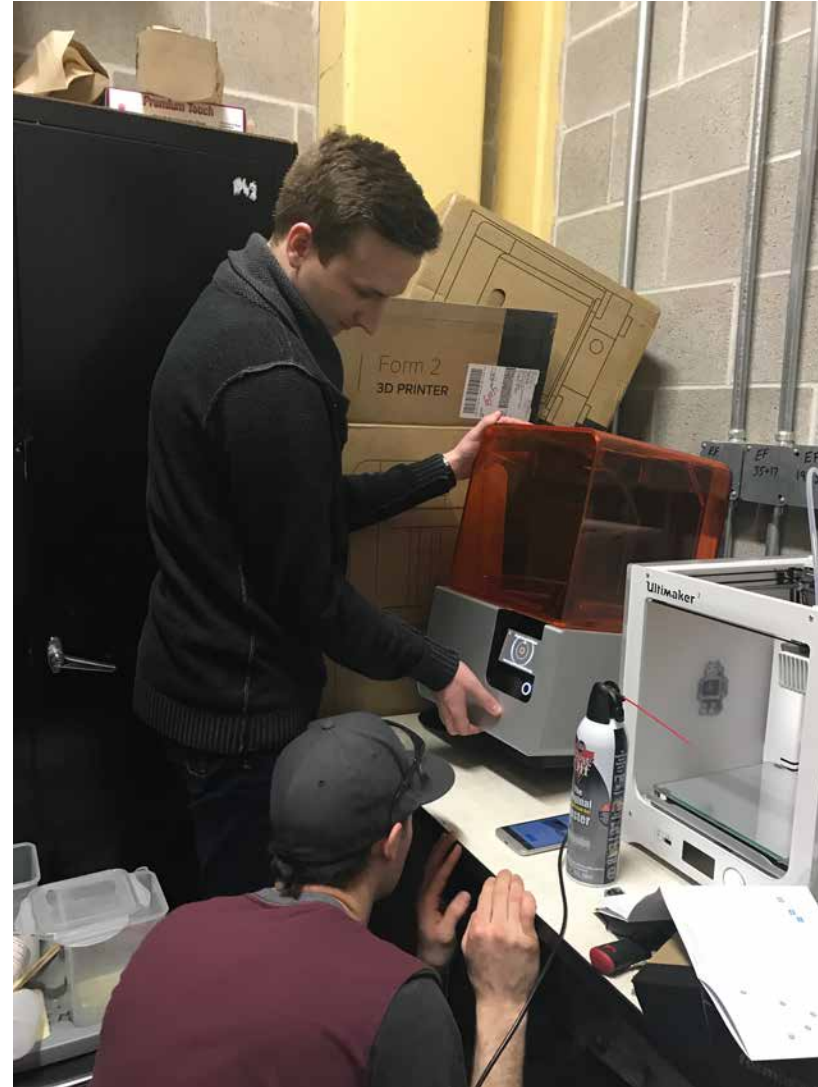






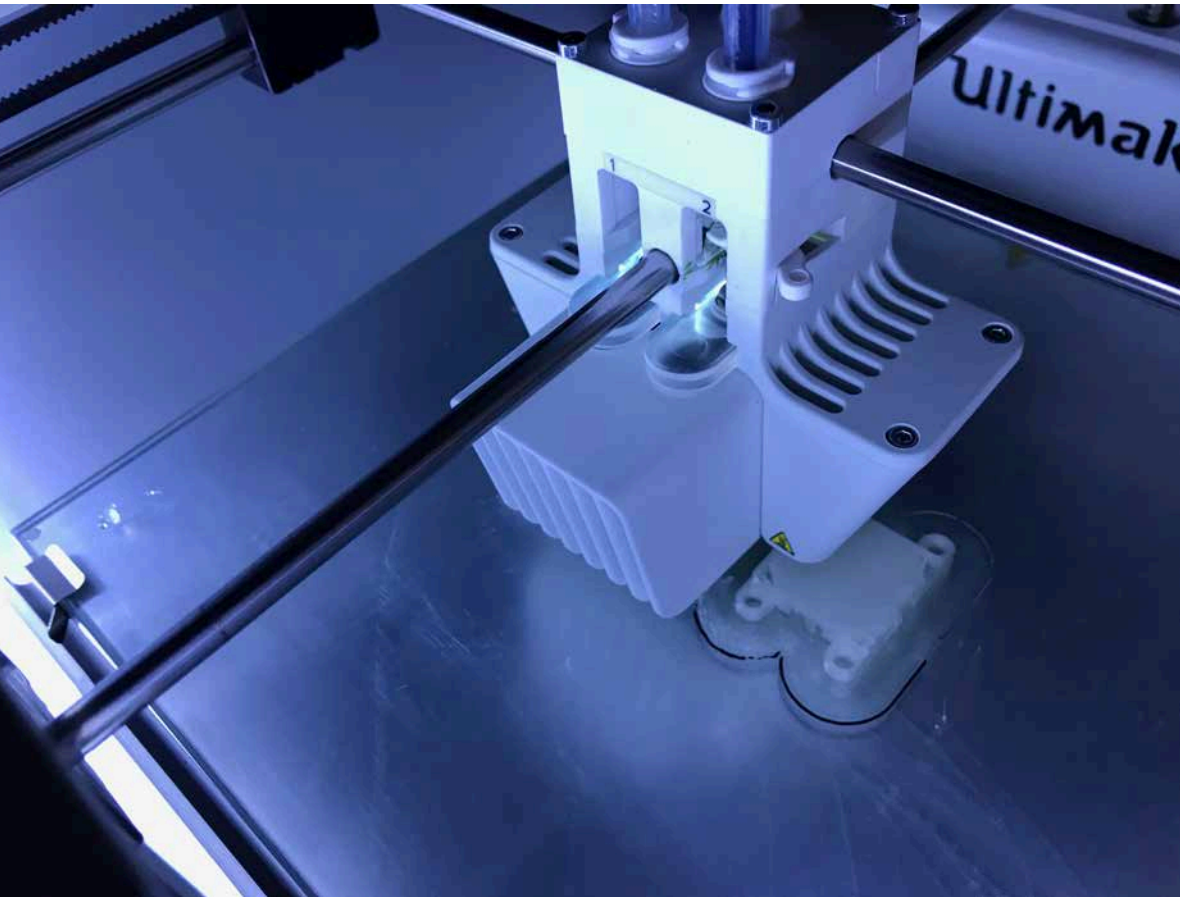
EXPLORATION
AT UW-STOUT
[SPRING 2018]

PURCHASE + INVESTIGATION OF 2 NEW 3D PRINTERS



ULTIMAKER 3
FORMLABS 2

ULTIMAKER 3



JEFF PEASE



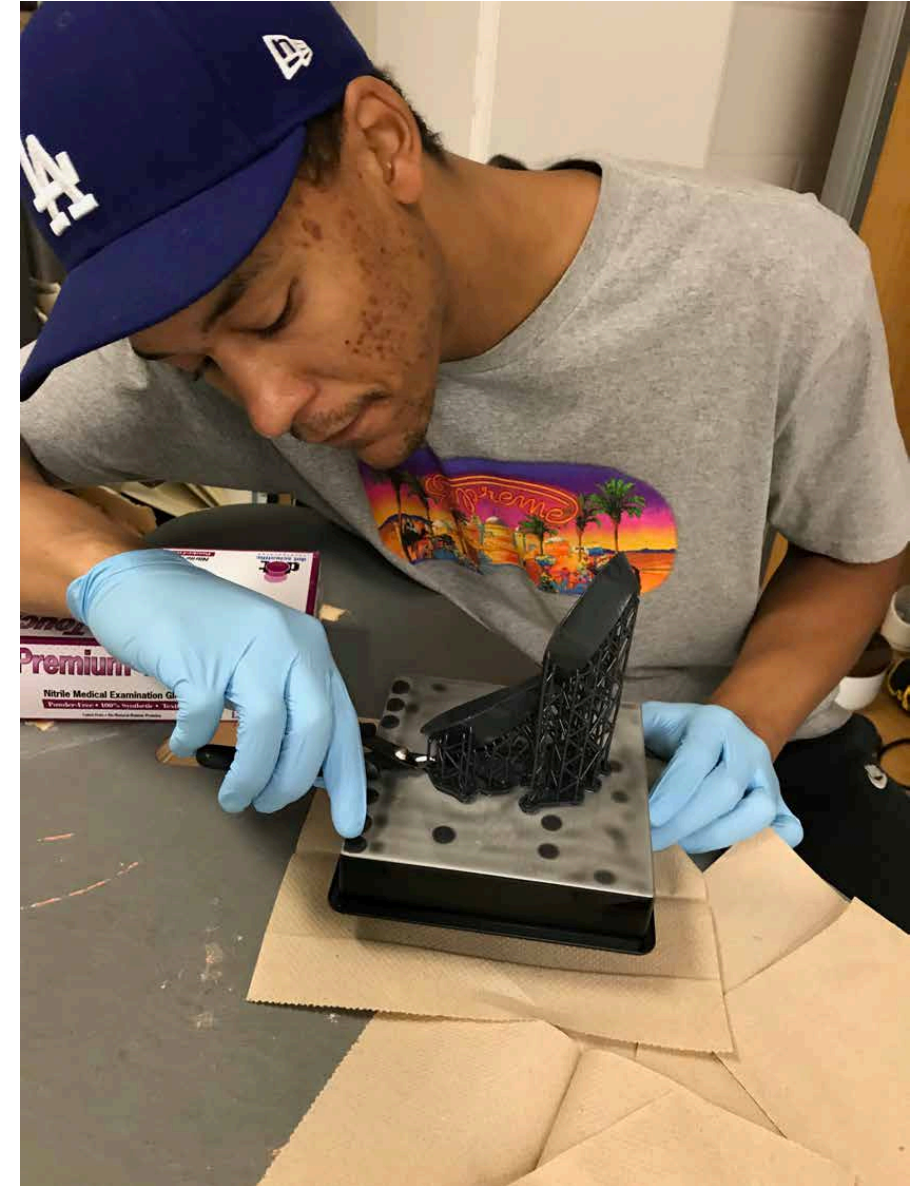
FORMLABS 2



FORMLABS 2



KENYON BRANDON



APPEARANCE MODELS + PROTOTYPES



GOGGLES



KENYON BRANDON



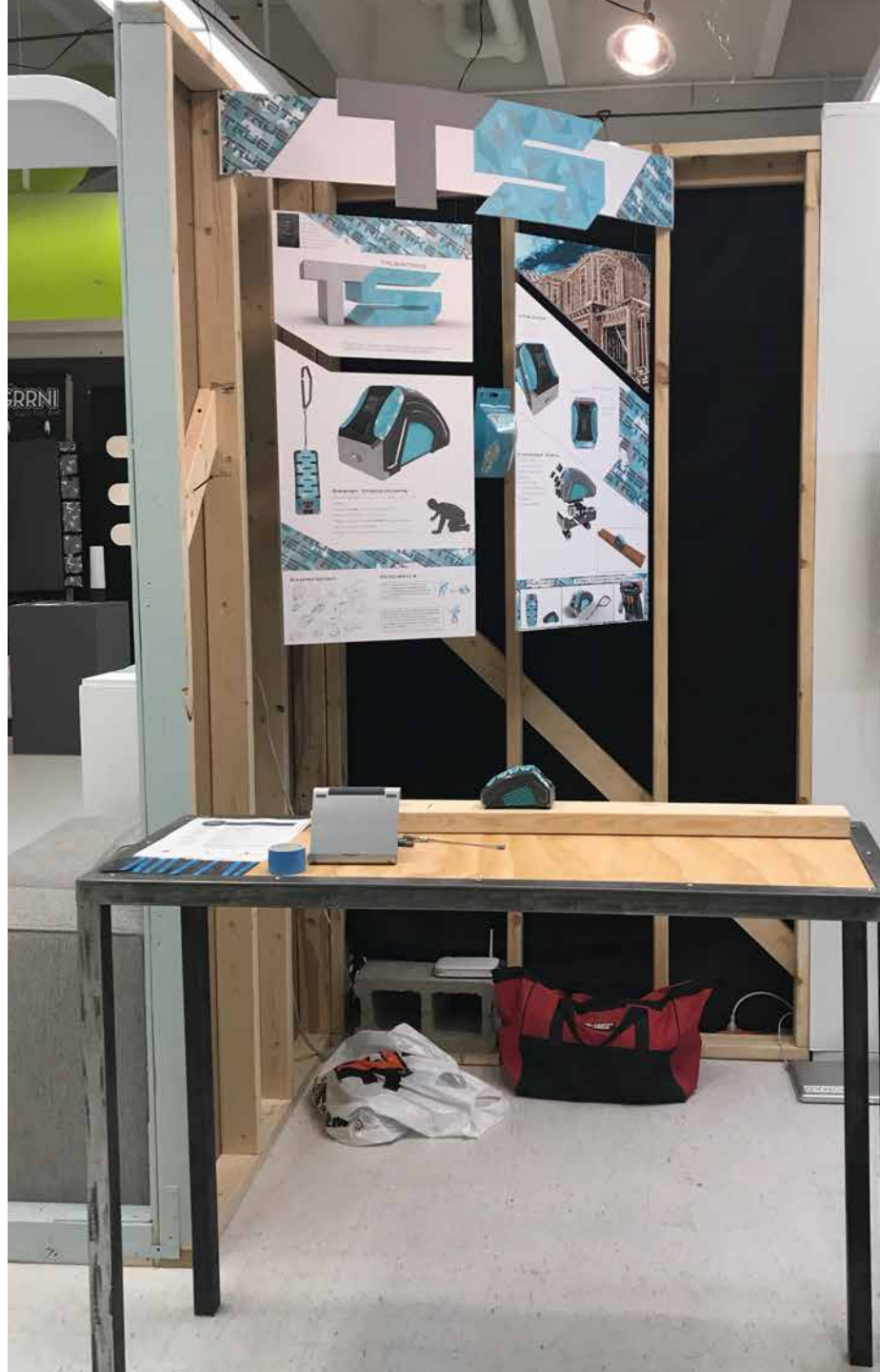
STUD FINDER



CALEB TOFT



STUD FINDER





**Thank you for your time
+ keep making!**