

THE HANDS CAN TELL A LOT

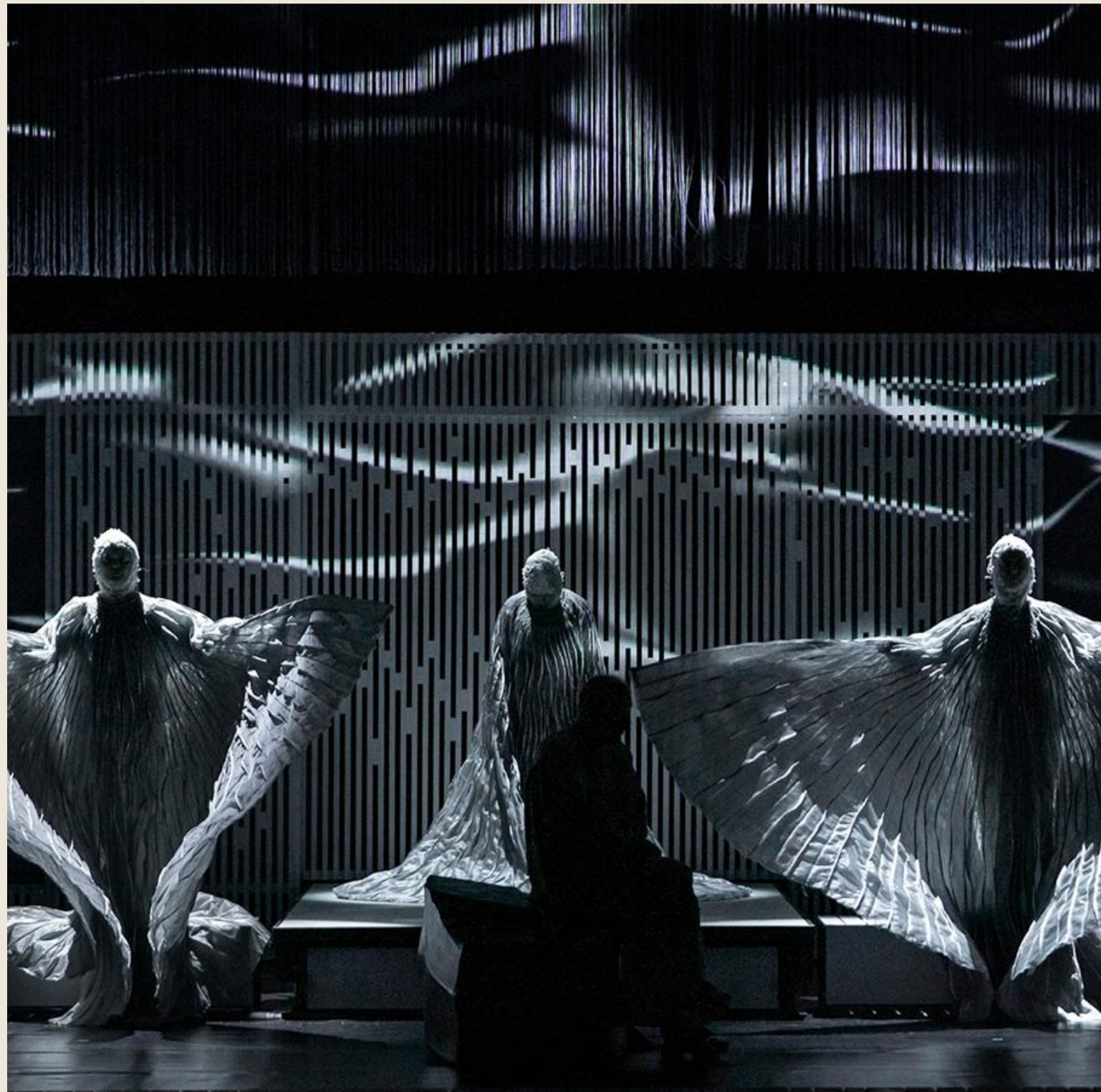
ANOUSH ARSHAKYAN | FABRICADEMY 2025



THE STORY OF MEMORY

Body is archive—a landscape of time where every wrinkle, scar, and mark is a fragment of an untold story.

The Hands Can Tell a Lot is an interactive scenography, a conversation with time, capturing the ephemeral yet permanent imprints of life on our skin.



INTERACTIVE SCENOGRAPHY

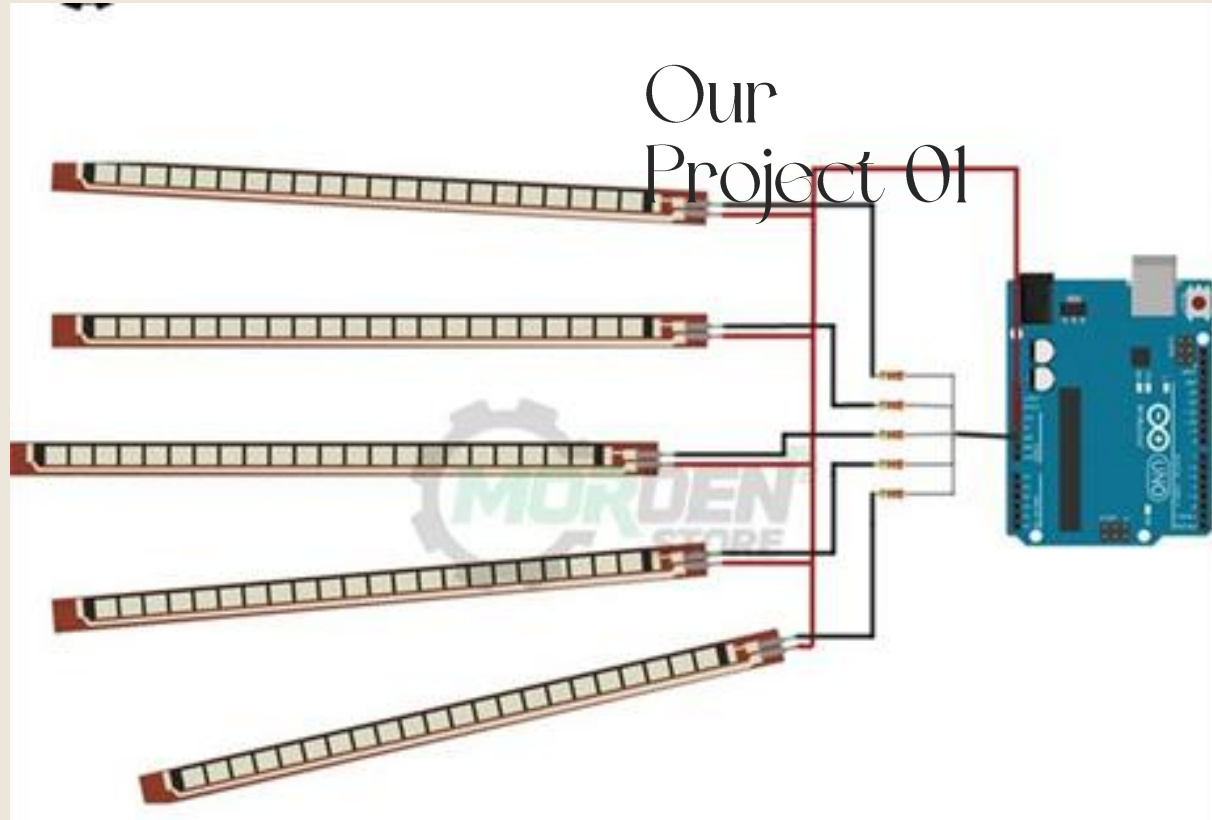
... In the context of **interactive scenography**, this concept allows the body to transform the performance environment, blurring the line between performer, space, and emotions.

ISABELLE BONTÉ: ÉQUATION DIFFÉRENTIELLE STOCHASTIQUE

By centering on the testimonies of PSA-Aulnay workers during the factory's closure, Bonté captures the emotional weight of their experience. Her focus on their hands as vessels of physical memory adds an intimate, tactile dimension, transforming their stories into something felt rather than just heard—a poignant reminder of the people behind economic shifts.



Our
Project 01



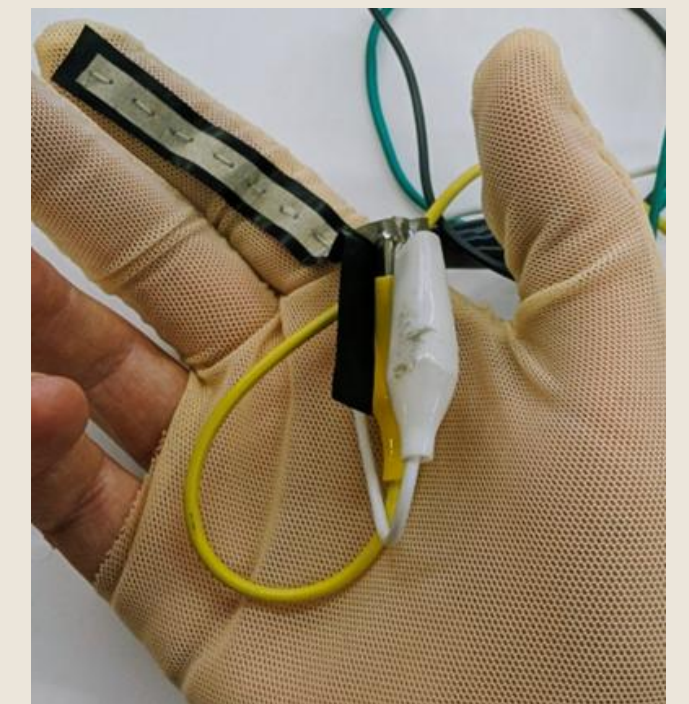
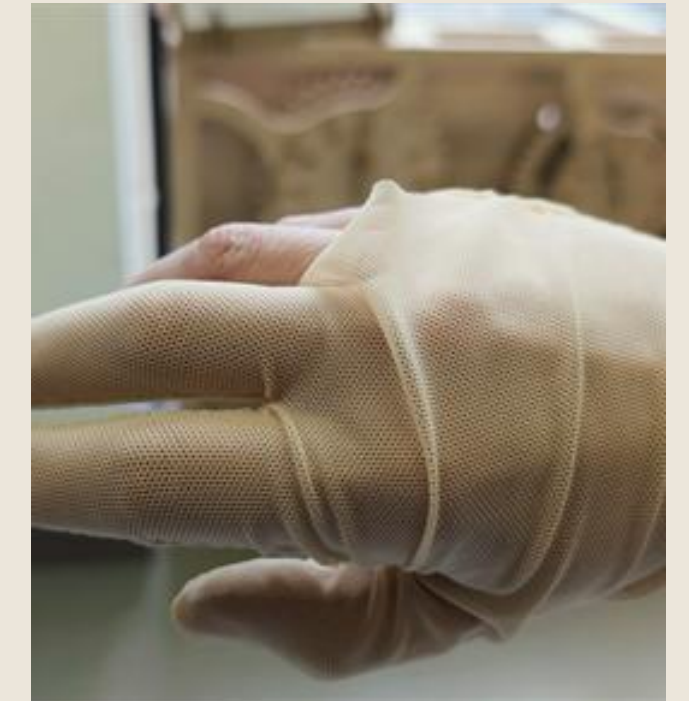
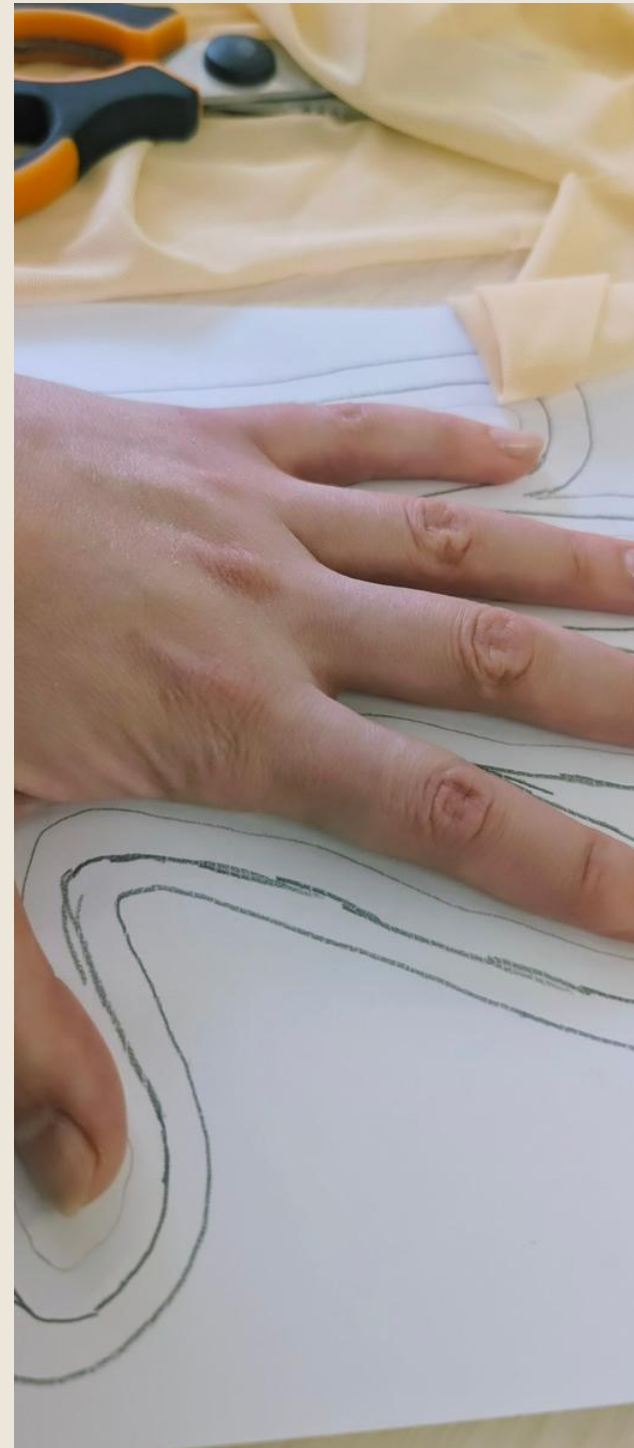
HOW IT WORKS?



The project creates a dialogue between movement and material. A glove embedded with flex sensors captures the subtle motions of the fingers, sending data wirelessly to the bioplastic origami mechanism.

FROM GLOVE TO TOOL

Turning a simple glove into a tool involves integrating sensors or functional materials to enhance its capabilities. By adding flex sensors, conductive threads, etc., the glove can detect hand movements, gestures, or grip strength, becoming an interactive device for applications like motion tracking, human-computer interaction, or assistive technology.



FLEX SENSOR: RECIPE



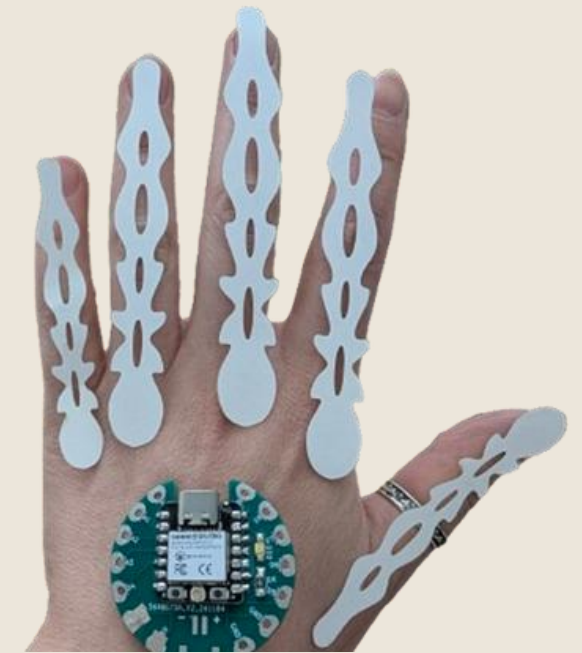
- Conductive Fabric: 2 Strips
- Velostat: 1 Strip

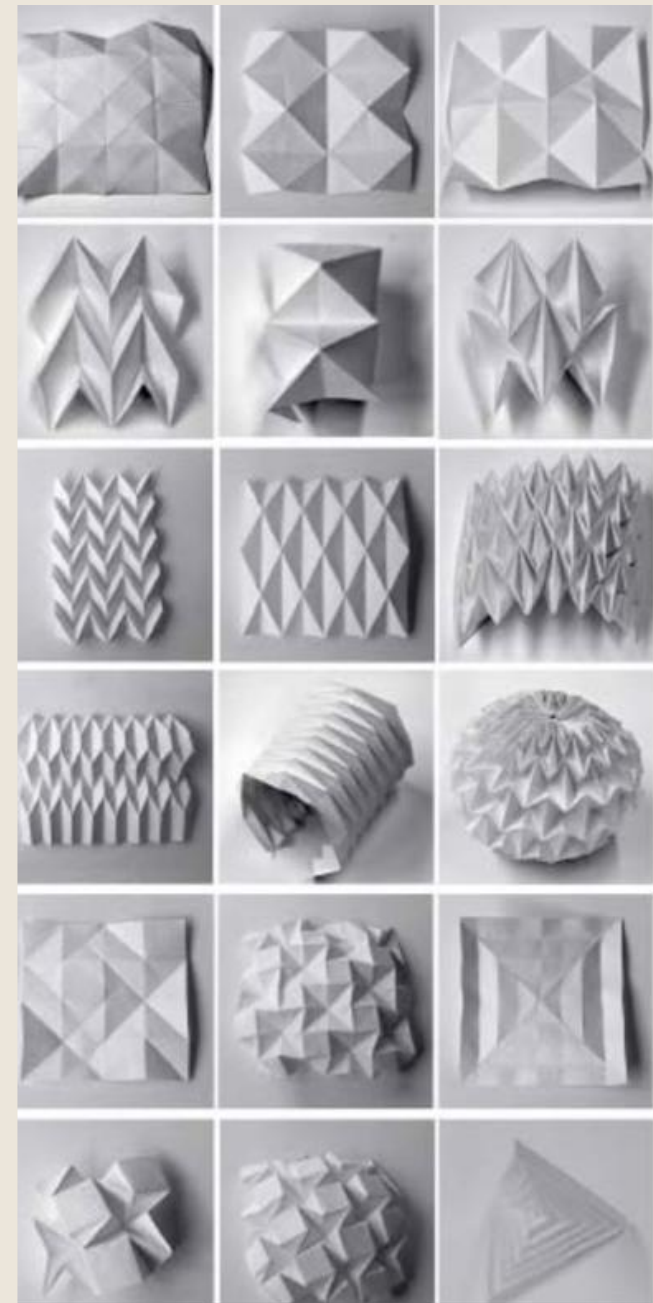
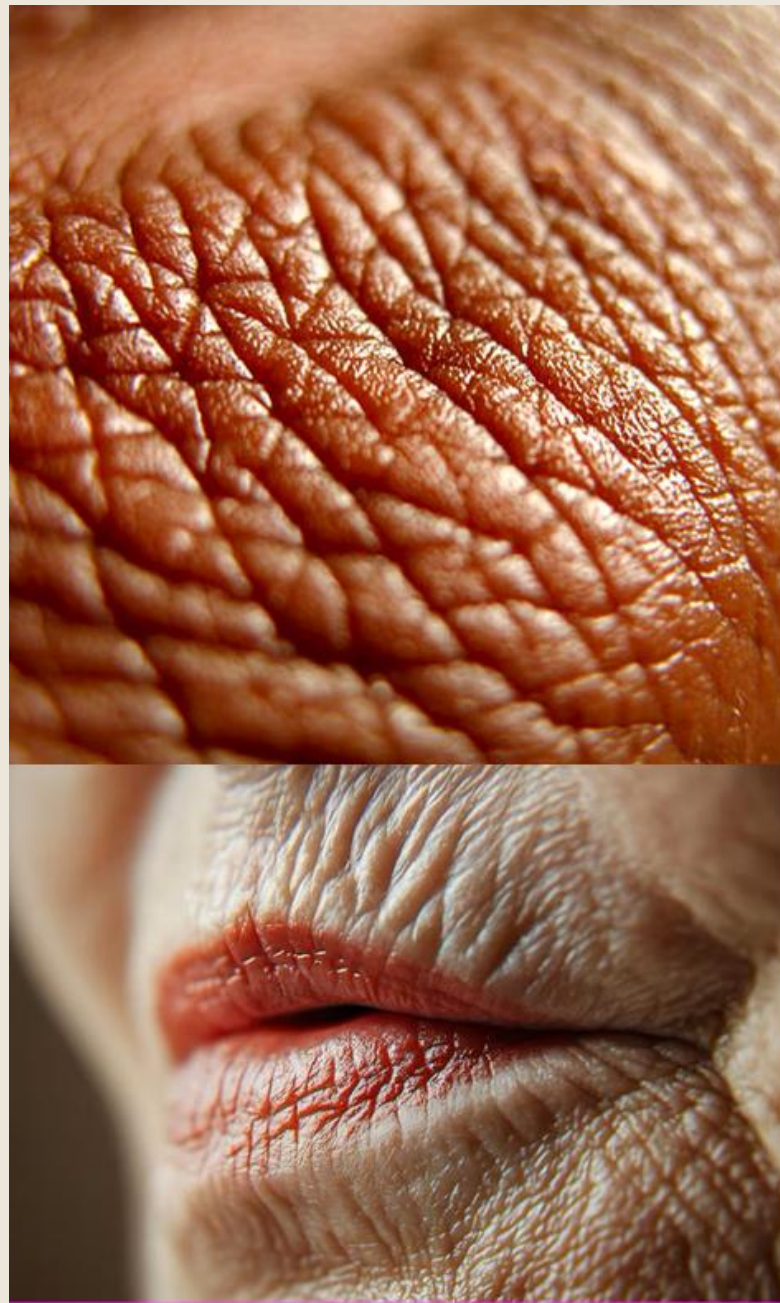
Layer two strips of conductive fabric on either side of a piece of Velostat, ensuring they don't touch, then connect wires to the fabric to measure resistance changes as the sensor bends, controlling the servo motors via wifi.

FROM PAPER PROTOTYPE TO DIY FLEX SENSOR



- XIAO ESP32C3 - FabriXiao
- Laser Cut Sensors
- Hard-Soft Connection
- Bioplastic Origami





ORIGAMI: THE ART OF FOLDING TIME

Like **origami**, the skin folds, unfolds, and transforms, carrying the **imprints of time and movement**. Each crease and line tells a story. Both are living structures—flexible, resilient, and continuously evolving, holding the traces of touch, tension, and transformation.

TRADITIONAL TESSELLATION



baking paper



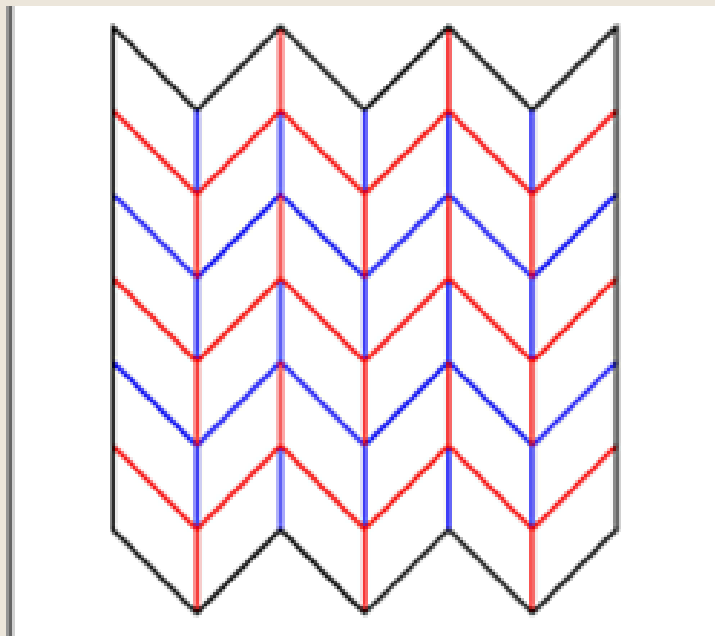
chiffon



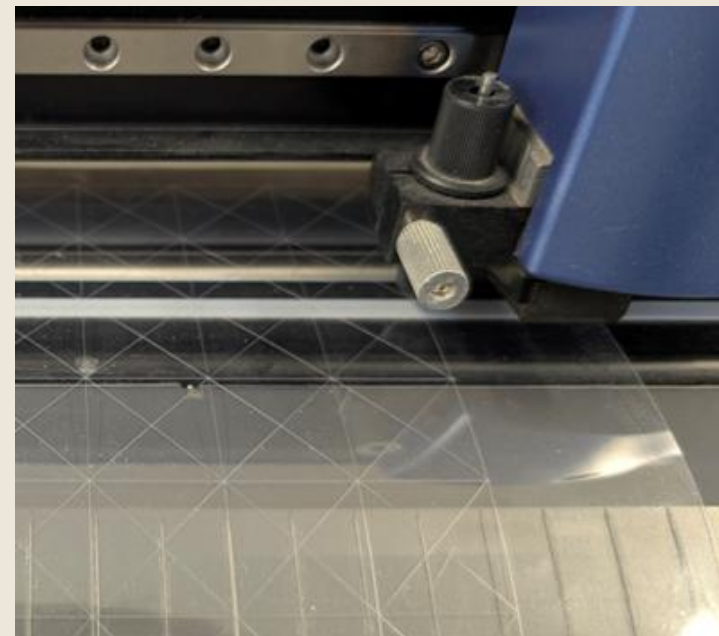
bioplastic

Origami tessellation, a traditional technique using precise folds to create geometric patterns, works beautifully with baking paper, taking advantage of its flexibility and translucency for unique, structured designs.

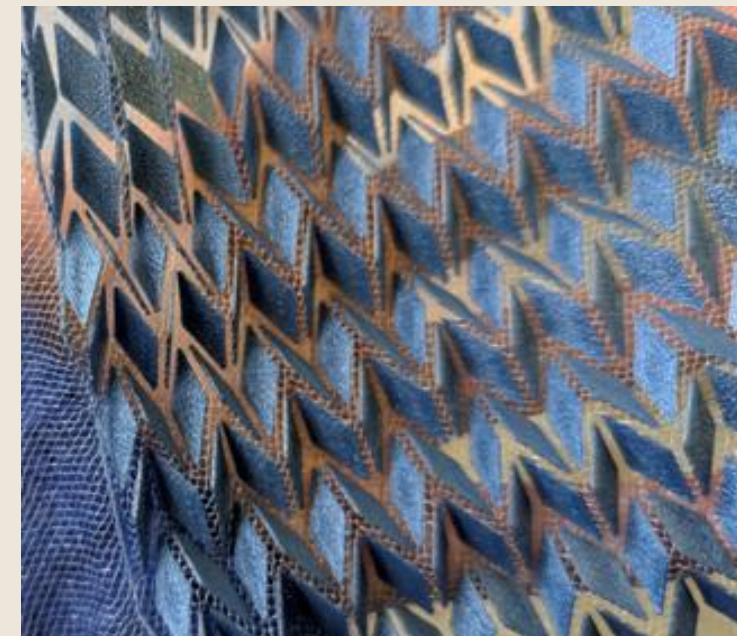
MAKE IT DIGITAL



2D design



kiss cutting



3D printing on textile

Digital fabrication simplifies origami tessellations by using a vinyl cutter to score plastic sheets for precise folds or 3D printing on textiles to create structured, flexible patterns with integrated design elements, going from drawing to result.

ORIGAMI TRANSFORMATION



By placing the soft bioplastic over the pre-folded or structured sheet, it takes on the geometric patterns as it dries and hardens. This technique merges digital precision with organic material properties, allowing controlled deformation while maintaining flexibility.



FOLDABLE BIOPLASTICS: RECIPE



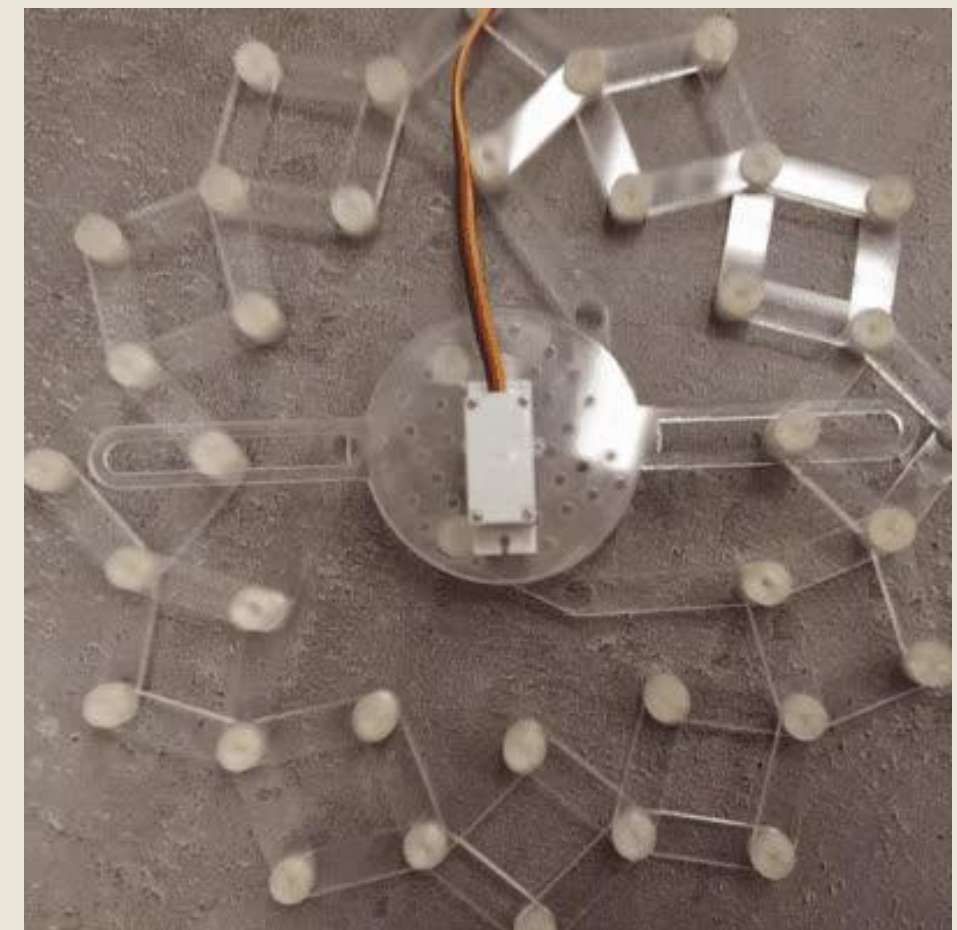
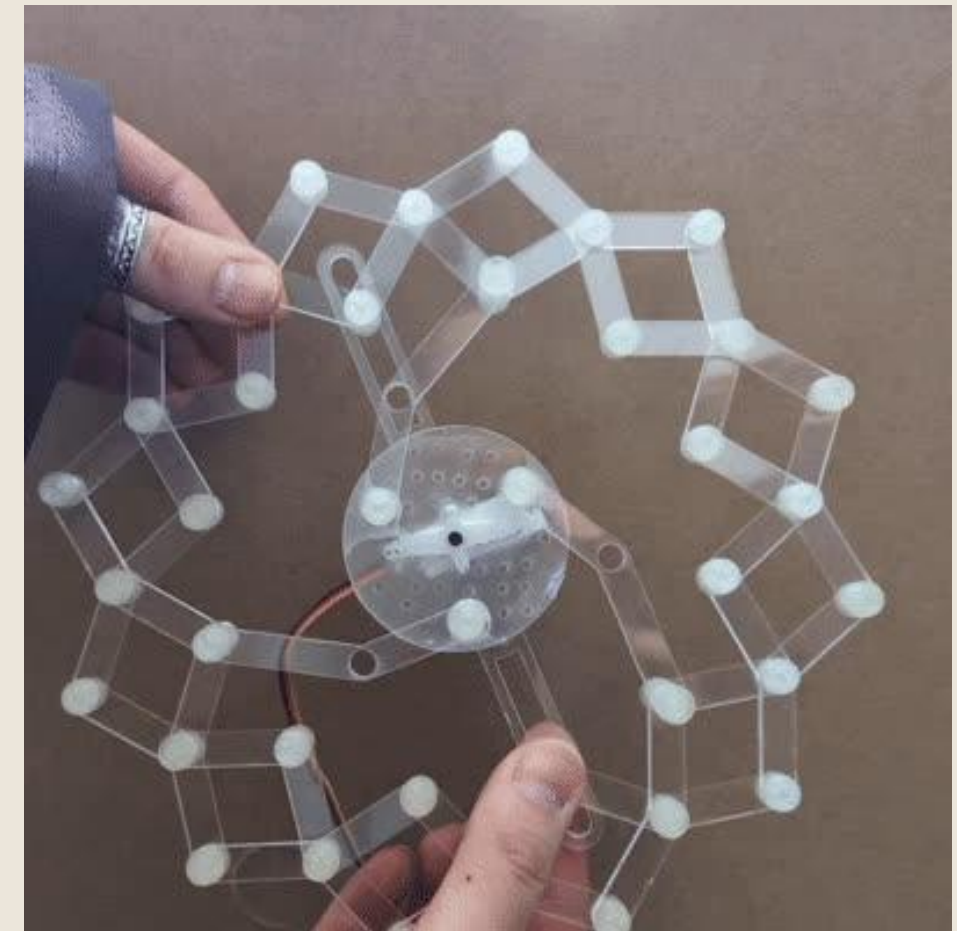
Water:	300 mg
Gelatin:	38 mg
Alginate:	1 mg
Glycerin:	35 mg

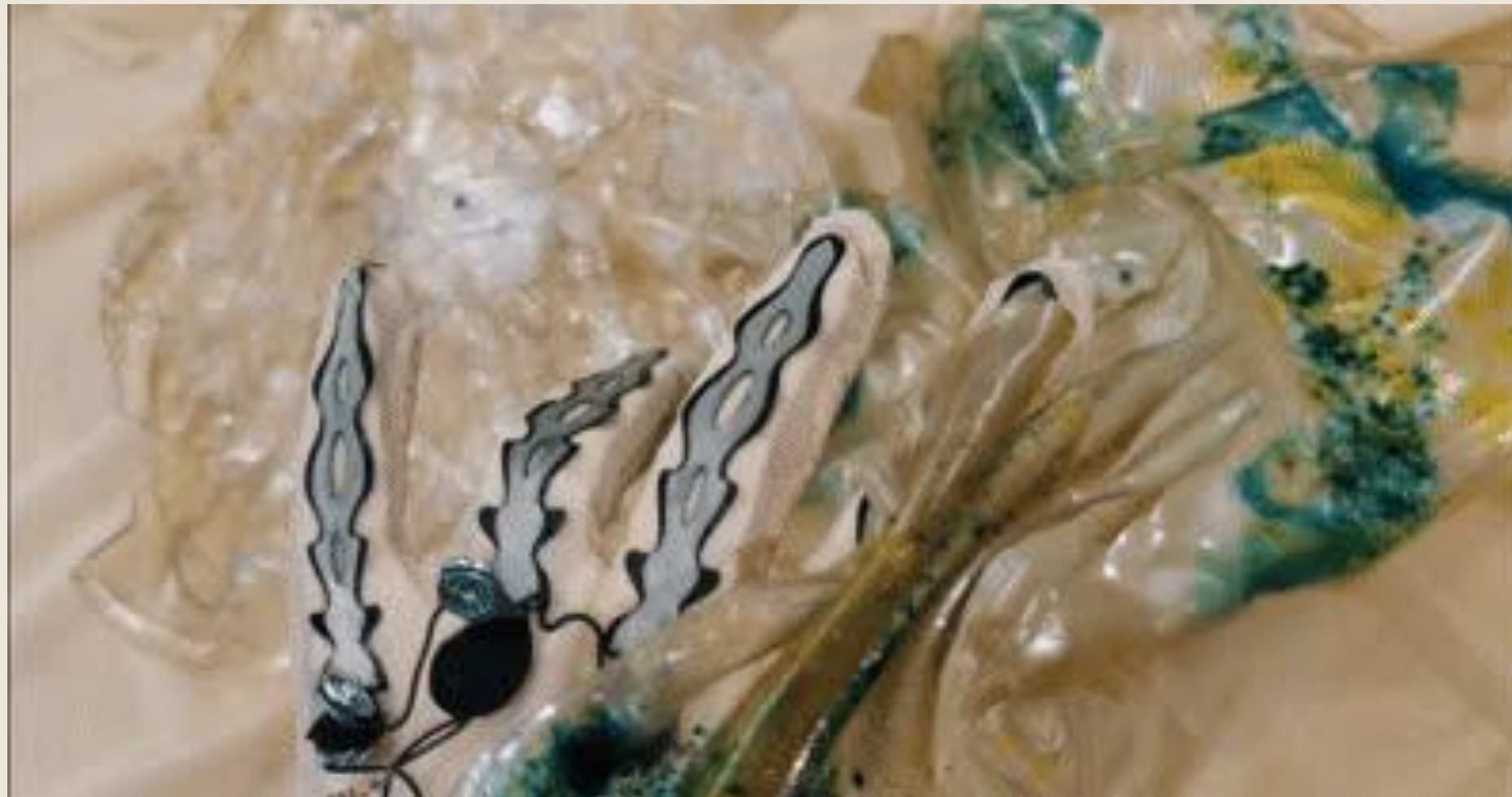
Add alginate to cold water, heating while stirring until it dissolves at 30–35°C. Gradually add gelatin, mixing until fully dissolved. Once the mixture reaches 80°C, add glycerin and stir. Let it cool, stirring occasionally. When it hits 50°C, pour into a mold and let it set.

MECHANISM THAT MAKES MOVE

- 120 details laser cut
- 176 printed details
- 4 servo motors

All components are assembled into a sun-like mechanism, including the motor, board, and LiPo battery, working together seamlessly to power the system.

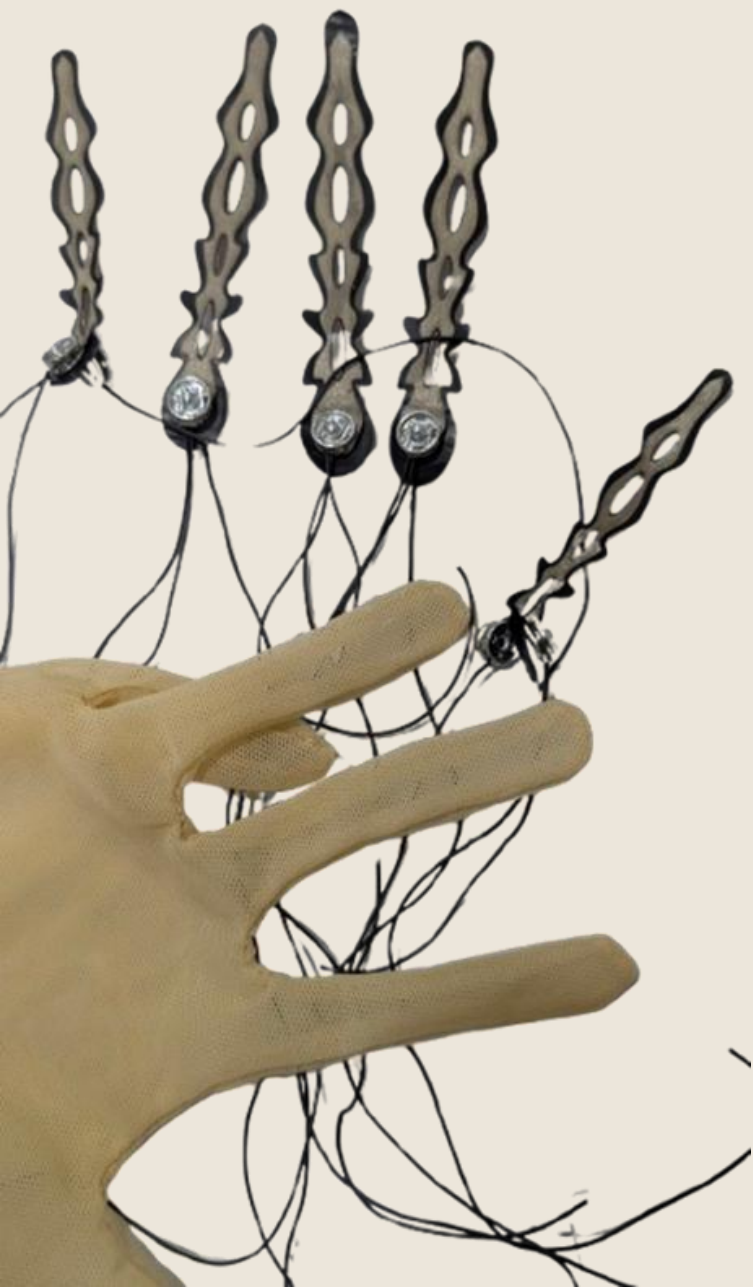




HOW IT WORKS?

I combined origami-shaped and naturally wrinkled bioplastics on a moving mechanism, allowing controlled deformation while preserving the organic flexibility of the material.

FLEX SENSOR ISSUE



The issue with the flex sensor arose when some areas of the laser-cut conductive fabric were too thin, disrupting the conductivity and causing inconsistent signal flow, which made the sensor unreliable.

Non- working
flex sensor



Working
flex sensor





SOO SUNNY PARK: UNWOVEN LIGHT



NNENNA OKORE: BIOPLASTIC INSTALLATION

NEXT STARTS NOW

The project's future envisions a large-scale installation, where collaboration with artists blends art and technology, creating a space that transforms perception and fosters new ways of interaction and connection.



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FABRICADEMY 2024 – 2025

PROJECT BY ANOUSH

ARSHAKYAN

VIDEO AND EDITING BY LUSINE PAPOYAN

SOUND BY ARTYOM MANUKYAN

GRATITUDE TO FAB LAB ARMENIA

EDUCATION FOUNDATION TEAM

GRATITUDE TO ANASTASIA PISTOFIDOU

AND FABRICADEMY COORDINATION TEAM

GRATITUDE TO MELISSA COLEMAN

AND STEPHANIE VILAYPHIOU

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