FIELDLAB UPPS

HYPER curve STUDIO

PERSONALIZED AVATARS & BLEND SHAPE TOOL FOR LINGERIE

MEET OUR TEAMS

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HYPERcurve STUDIO

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RESEARCHER

TU DELFT

FEBE DE VOS
3D MODELLER

HYPERCURVE STUDIO B.V.

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MY BACKGROUND

Amsterdam

Education:
@AMFI, Hypercraft

Retail: Lingerie boutiques
@Annadiva

Design & 3D innovation:
Prima Donna
@Van de Velde

Bigger mission
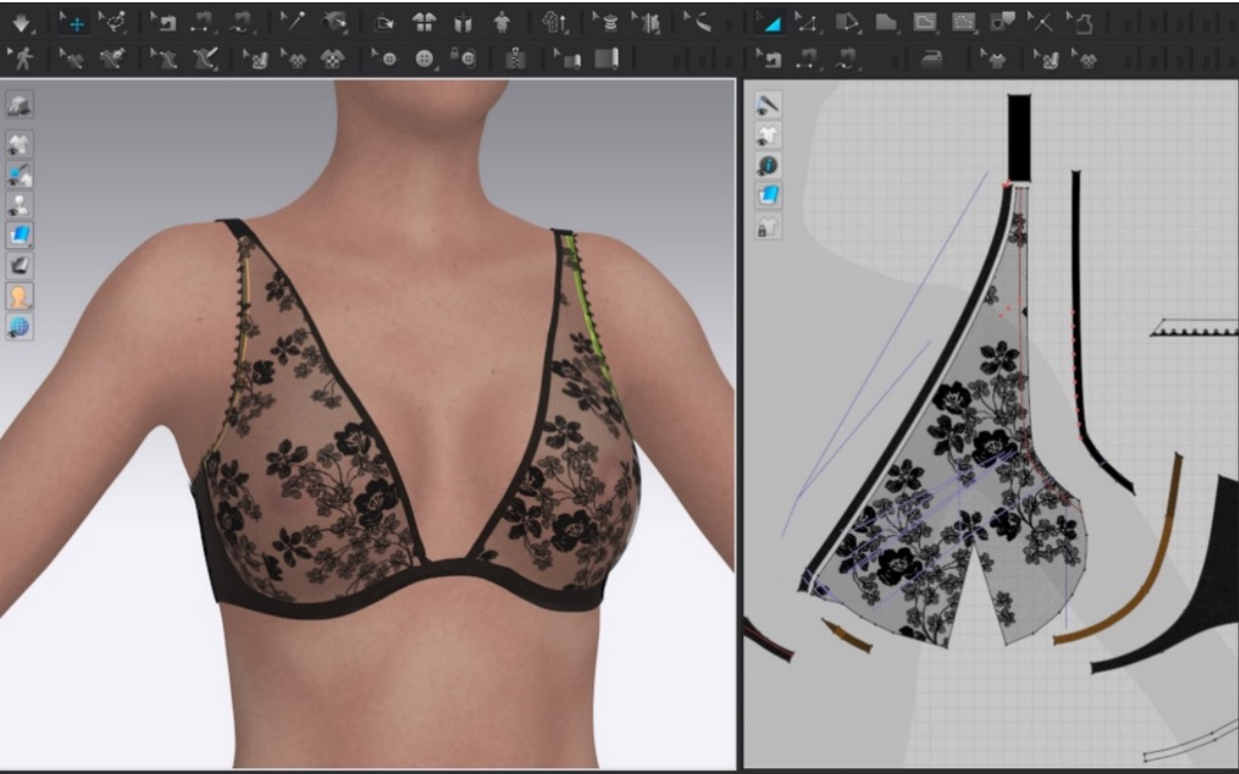
Partnership
Forster Rohner AG
Luxury embroidery

HYPERcurve studio
2020

HYPER curve STUDIO = DIGITAL CRAFTSMANSHIP

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WHY 3D?

TRADITIONAL

STEP 1
Select swatch

STEP 2
Sketch

2-3 WEEKS

STEP 3
Meters

1-8 WEEKS

STEP 4
Prototype creation

STEP 5
Assessment

STEP 6
Alterations

2+ WEEKS

STEP 7
Textile sampling

Again and again...

WHY 3D?

TRADITIONAL

STEP 1	STEP 2	2-3 WEEKS	STEP 3	1-8 WEEKS	STEP 4	STEP 5	STEP 6	2+ WEEKS	STEP 7
Select swatch	Sketch		Meters		Prototype creation	Assessment	Alterations		Textile sampling

Again and again...

+ 3D TOOLS

STEP 1	STEP 2	1 DAY	STEP 3	1 DAY	STEP 4	1 DAY	STEP 5	STEP 6	2+ WEEKS	STEP 7
Swatch	Sketch		Swatch scan		Proto creation		Assessment	Alterations		Textile sampling

Textiles © Forster Rohner AG

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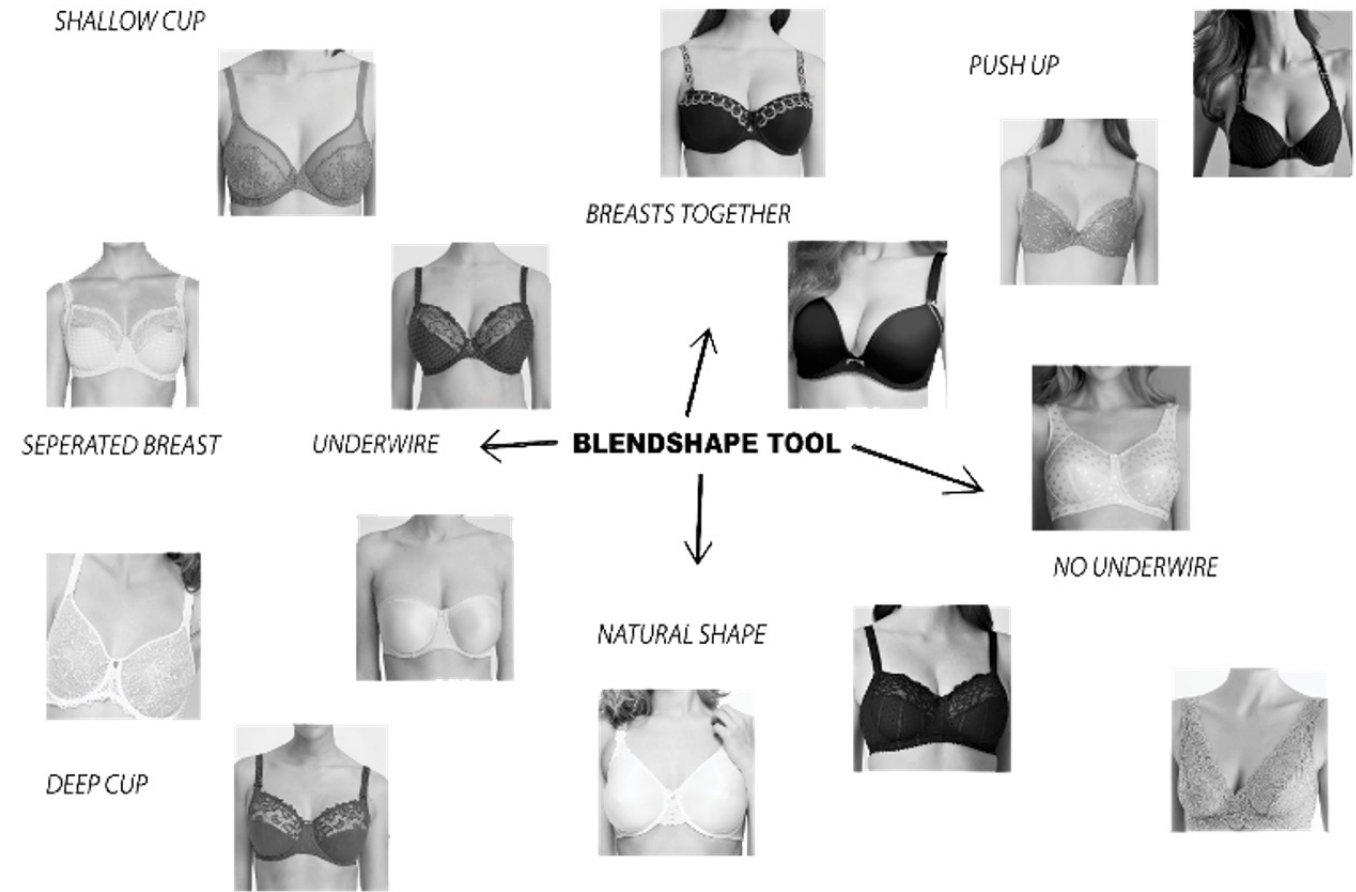© HYPERUPPS

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PROBLEM DEFINITION

Accurate 3D body models for breast / bra fit simulation

PROJECT GOAL

Develop a tool that generates accurate body models for visual digital lingerie sampling.

Scanning costly

Foundation for personalization

SHALLOW CUP

PUSH UP

BREASTS TOGETHER

SEPERATED BREAST

UNDERWIRE

BLENDSHAPE TOOL

NO UNDERWIRE

DEEP CUP

NATURAL SHAPE

ACTIVITIES

STEP 1

Selecting participants, sizes and products (bra shapes)

STEP 2

Shape capturing

STEP 3
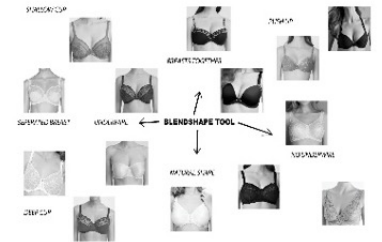
Cleaning scans & subtracting bra from digital body scan

CORE

STEP 4

Comparing scans
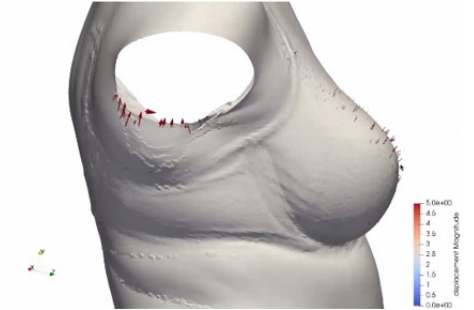
STEP 5

Creating BLEND SHAPE tool

STEP 6

Using BLEND SHAPE tool in Clo3D with Bra testcase

© HYPERcurve studio

RESULTS & TAKEAWAYS

$\Large\circ\hspace{-0.5em}>$ **SHAPE CAPTURES**

$\Large\circ\hspace{-0.5em}>$ **BLENDSHAPE TOOL**

$\Large\circ\hspace{-0.5em}>$ **IMPLEMENTATION IN THE INDUSTRY**

A broader understanding of the challenges and opportunities for 3D body models in the future within the lingerie indsutry

IMPLEMENTATION

⊘ **BRAND SPECIFIC AVATARS**

For Triumph, Sloggi & Chantelle

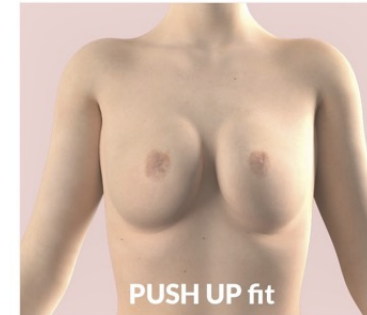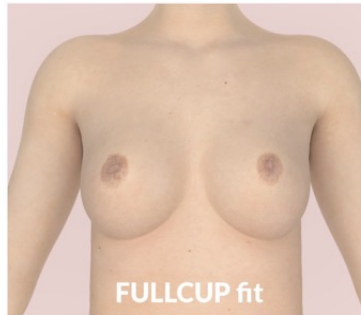⊘ **PRODUCT OPTIMALIZATION**

For Soft revolt

CHANTELLE

Triumph

sloggi

SOFT ЯEVOLT
INTIMATES

IMPLEMENTATION

⟩ **BRAND SPECIFIC AVATARS** *Triumph*

FULLCUP fit   PLUNGE fit   POINTY fit   PUSH UP fit

Textiles © Forster Rohner AG

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IMPLEMENTATION

○ **BRAND SPECIFIC AVATARS**
CHANTELLE

DIGITAL SAMPLE 75D   *VERSUS*   **PHYSICAL SAMPLE 75C**

IMPLEMENTATION

> **BRAND SPECIFIC AVATARS**
> **CHANTELLE**

DIGITAL SAMPLE 75D   *VERSUS*   **PHYSICAL SAMPLE 75C**

IMPLEMENTATION

⊙ PRODUCT OPTIMALIZATION

Soft revolt

vertical overbust curve - - -

bust points

overbust - - -

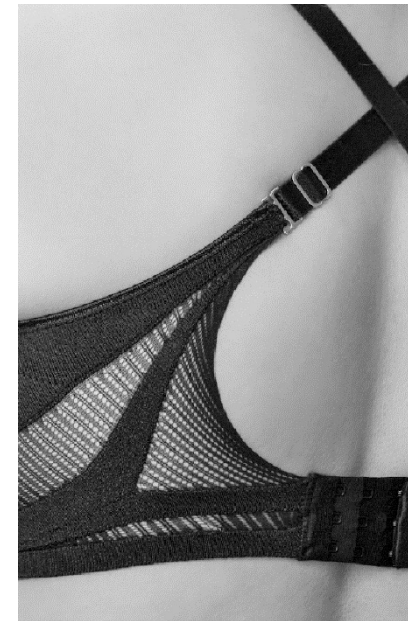underwire curve - - -
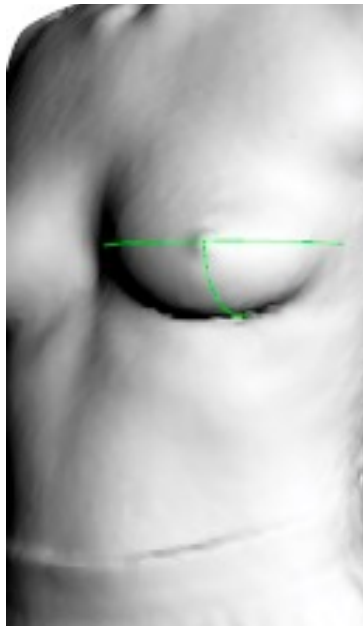
underband curve

© HYPERcurve studio

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IMPLEMENTATION

⊙ **PRODUCT OPTIMALIZATION**

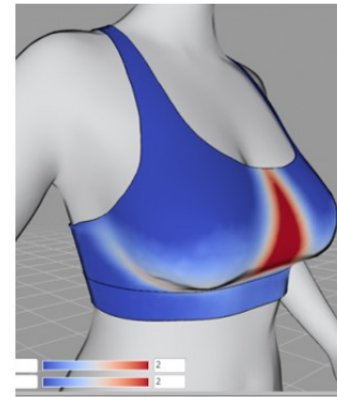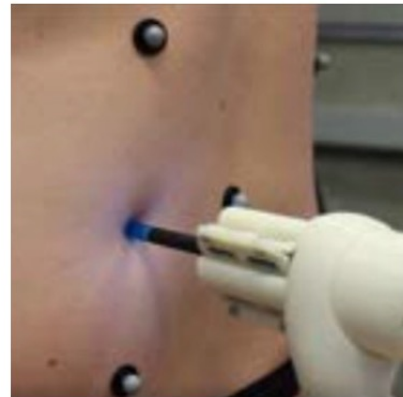SOFT ЯEVOLT
INTIMATES

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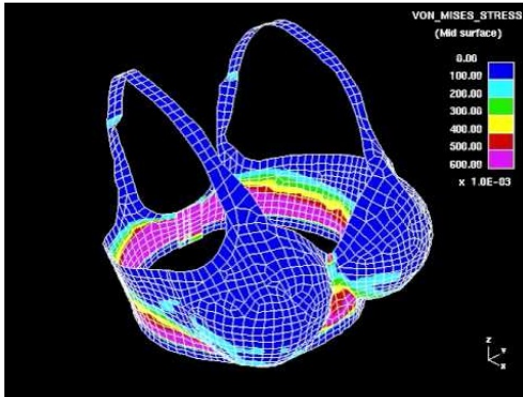
FUTURE STEPS

SOFT TISSUE AVATARS & DIGITAL FIT

Exploring and partaking in international research studies

© Vital Mechanics

PERSONALIZED DIGITAL TWINS FOR ECOM

The future online lingerie shop experiences is personalized

© HYPERcurve studio

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FUTURE VISION

TECHNOLOGY = CONNECTIVITY

3D = A TOOL
Not a solution or destination

LINGERIE = COMPLEX

FOCUS ON PREFERABLE FUTURE

END TO END

Present

Possible Futures

Plausible Futures

Preferable

Probable Futures

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