DIGITAL & CIRCULAR
FASHION HOUSE

SAVONIA
University of Applied Sciences

Bio and Circular Economy

European Union
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Leverage from the EU 2014–2020

Centre for Economic Development, Transport and the Environment

Suunnitteluprosessit 3D-ohjelmilla

Sirpa Ryynänen, Taija Kokkonen, Mikko Vidgren

Lehtori Muotoilija Projektisuunnittelija

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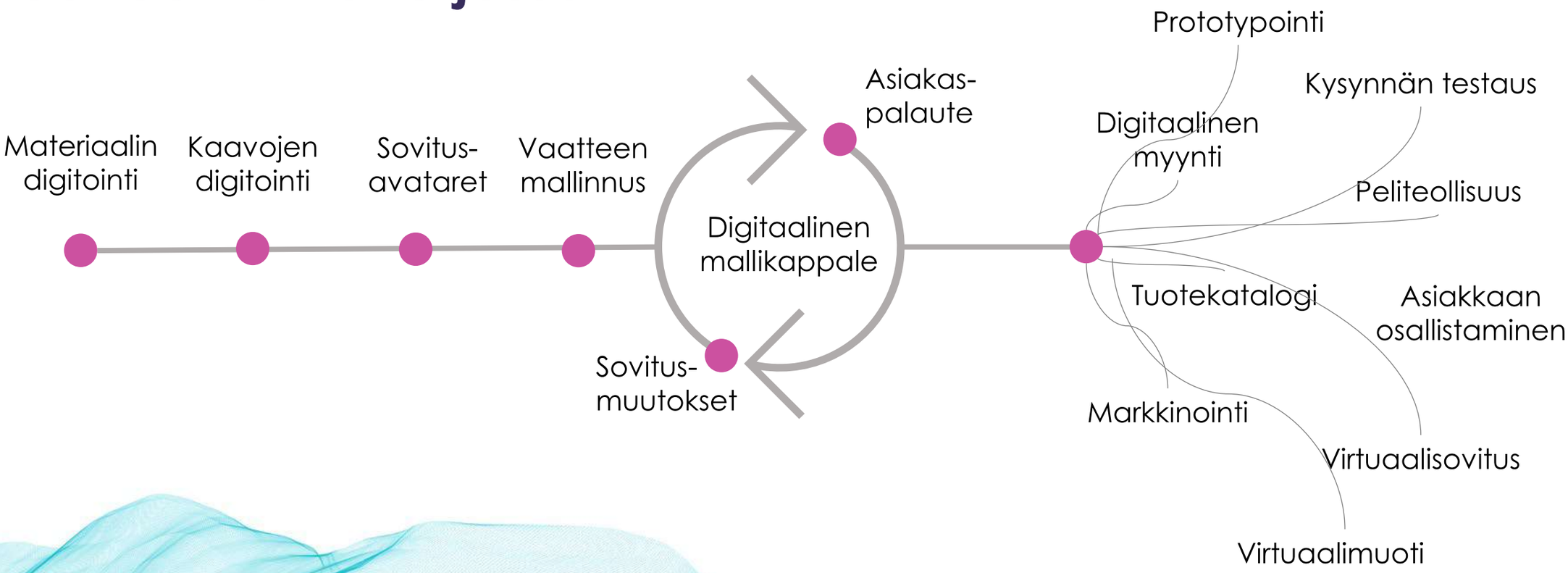
Käyttökohteita ja mahdollisuuksia

- Vaatetussuunnittelu
- Mallikappaleet
- Väri- ja materiaalivaihtoehdot
- Sarjonnan tarkastelu
- Tuoteohjeistukset
- Yrityksen sisäinen viestintä
- Esittelymateriaalit
- Markkinointi
- Kustomointi
- Uniikkipuku/mittatilaus
- Digitaalinen pukusuunnittelu
- Digitaalinen muoti
- Historiallisten pukujen digitointi
- Virtuaalinen sovitus

Vaatteen 3D-mallintaminen tuotteen arvoketjussa



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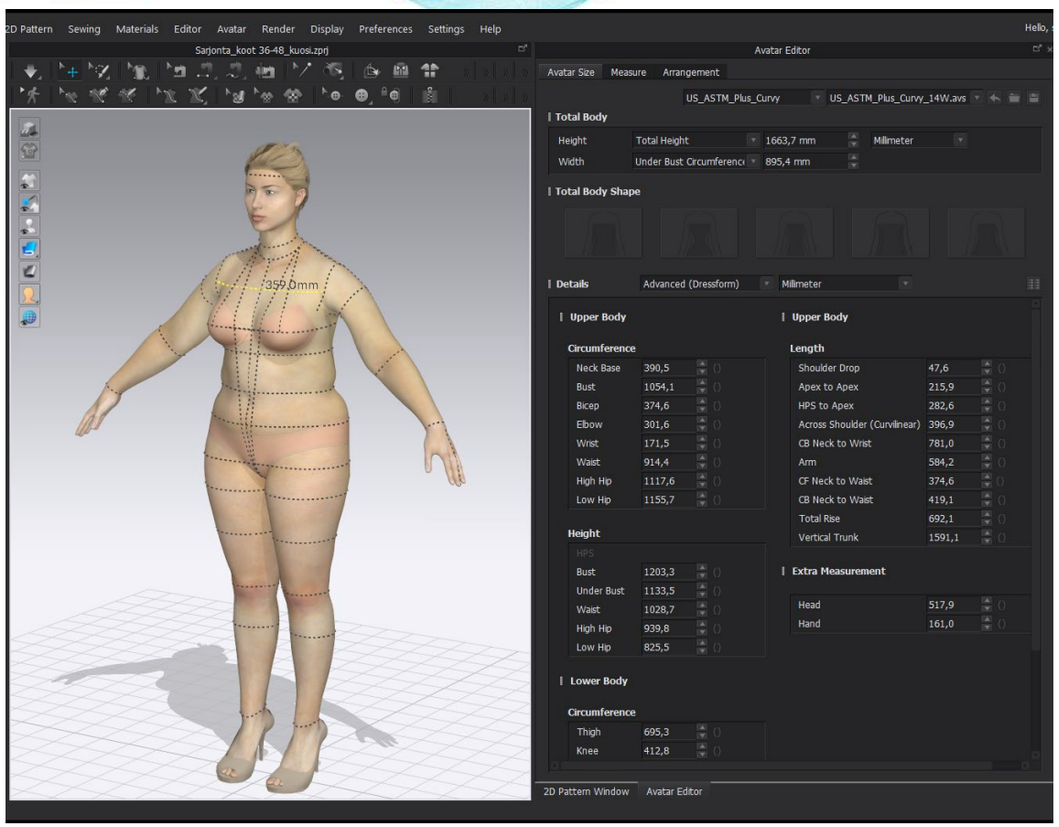
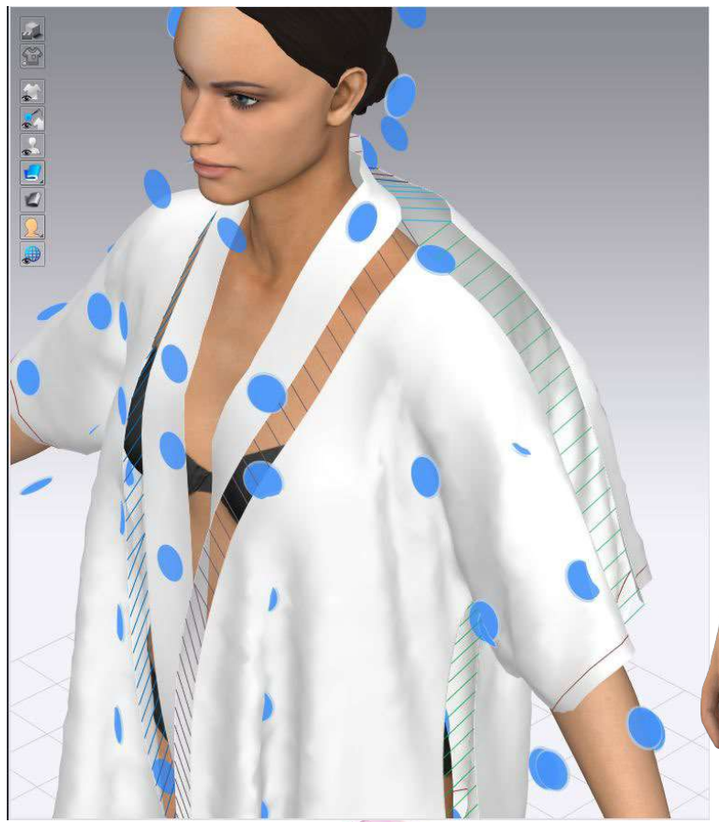
Elementit

- Digitaalinen sovitusmalli eli avatar
- Digitaaliset materiaalit ja lisätarvikkeet
- Digitaaliset 2D-kaavat
- Digitaaliset värit ja kuosit

Digitaalinen sovitusmalli eli avatar





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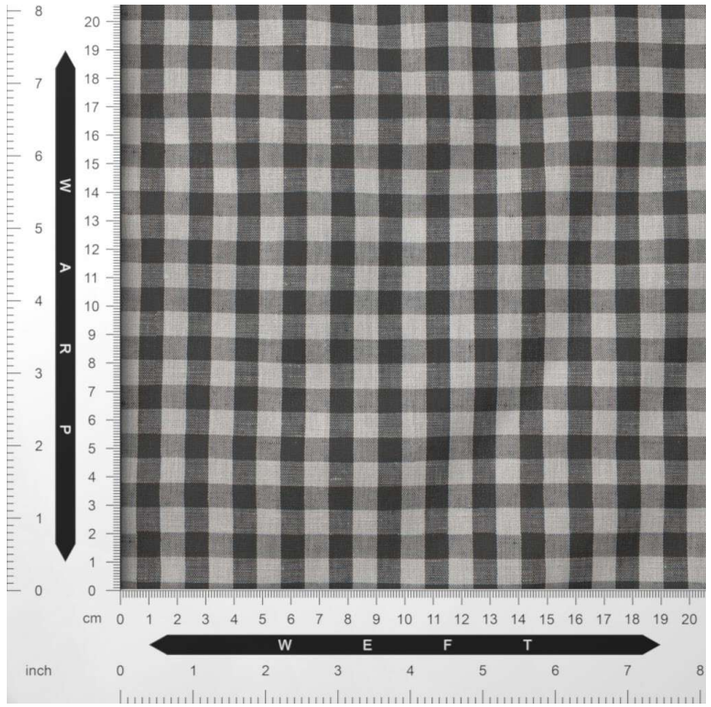
Digitaaliset materiaalit ja lisätarvikkeet

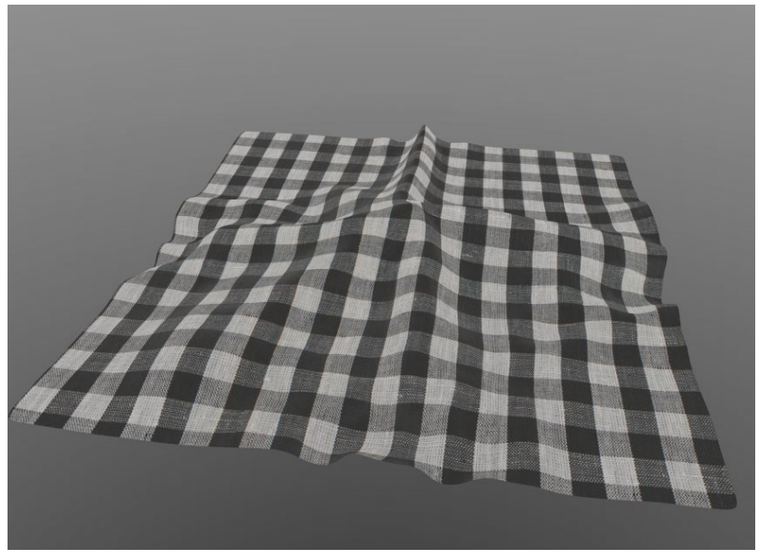
Vizoo xTex skannerilla luotu tekstiilin digitointi

Browzwear analysaattorilla digitoidut ominaisuudet

Use FAB Delete FAB Data

Mass		195.00			g/m2
Friction		0.20			
Thickness		0.33			mm
Bend	W	369.11	L	81.99	dyn*cm
Stretch	W	10,909	L	2,732.	N/m
Linearity	W	33.68	L	15.14	%
Shear		99.09			N/m
Linearity		95.96			%





Tutustu Savonia-amk:n tekstiilimateriaalien digitointilaitteistoon
https://youtu.be/Q3iaF04NLhc

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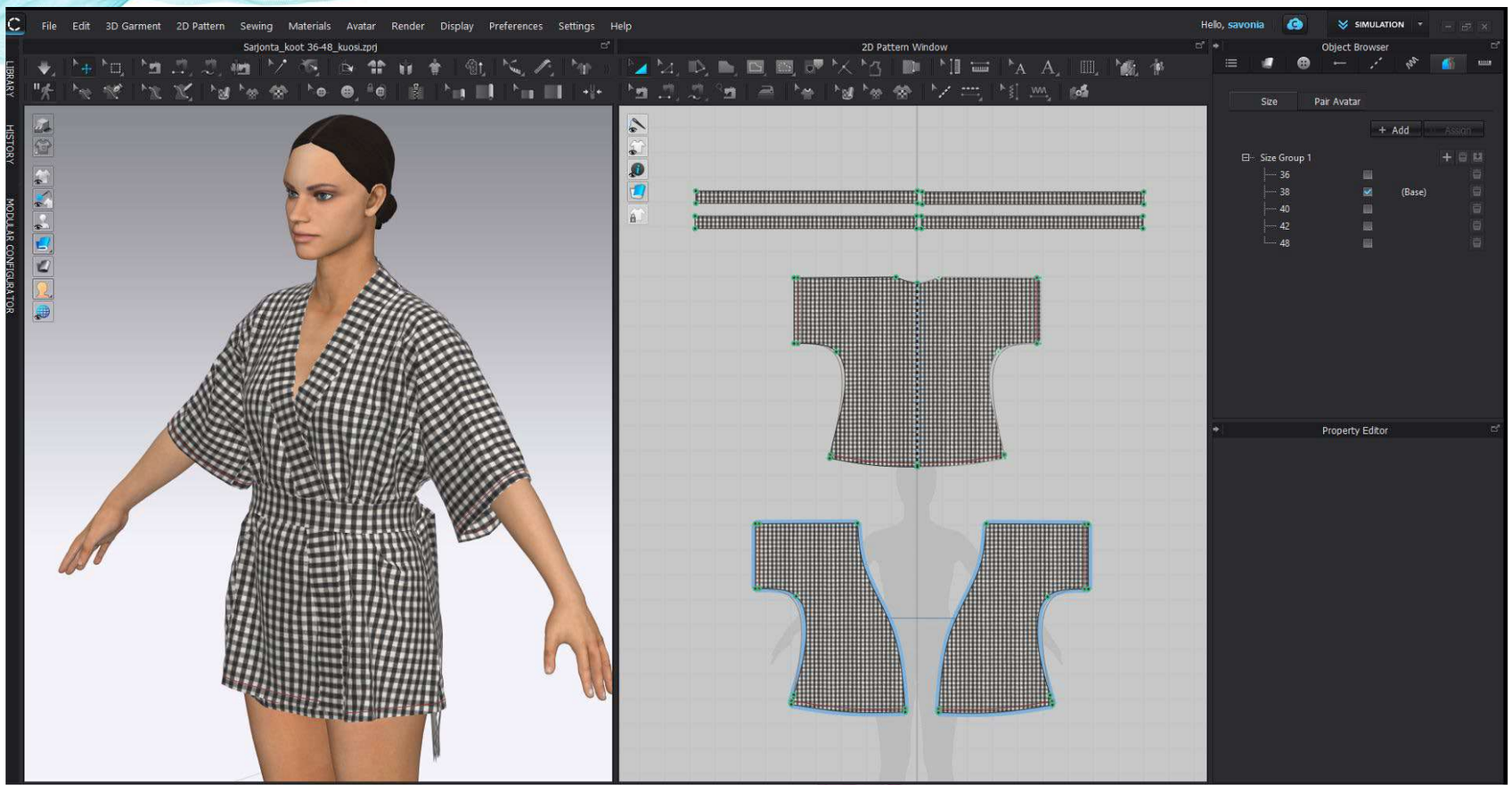
Digitaaliset 2D-kaavat

Clo3D-ohjelmassa voi suorittaa sarjonnan kaavoille ja testata jokaisen koon istuvuuden digitaalisessa ympäristössä.



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Sarjottuen kaavojen sovittaminen

Värivaihtoehtojen tekeminen

	Colorway A	Colorway B	Colorway C
			
FABRIC	Knit_Cotton_Jersey mineral_blue	Knit_Cotton_Jersey light_khaki	Knit_Cotton_Jersey deep_purple
	Cotton_label PANTONE 19-4201	Cotton_label PANTONE 19-4201	Cotton_label PANTONE 19-4201
GRAPHIC	dc_harsot_multicolor (None)	dc_harsot_multicolor (None)	dc_harsot_multicolor (None)
	dc_logo_lila (None)	dc_logo_lila (None)	dc_logo_lila (None)
	dc_carelabel (None)	dc_carelabel (None)	dc_carelabel (None)
	dc_necklabel (None)	dc_necklabel (None)	dc_necklabel (None)
	dc_brandlabel (None)	dc_brandlabel (None)	dc_brandlabel (None)
TOPSTITCH	ISO_406_Two_Neec dark_mblue	ISO_406_Two_Neec dark_teal	ISO_406_Two_Neec dark_purple
	ISO_406_Two_Neec dark_mblue	ISO_406_Two_Neec dark_teal	ISO_406_Two_Neec dark_purple

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Recognizing the need for change and development challenges for businesses.

Utilizing digital fashion technology to build more sustainable product design processes.

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DIMEX X Savonia School of Design

3D modelling as a new normal of functional fashion and product development process

Blogilinkki

"3D modelling can bring support to everyday product development, speeding up the process, reducing the number of samples of clothes made and sending them "here and there". "
- Tuire Krogerus, Dimex Oy, 2022

R&D, Digital Fashion Design, Fashion Technologies - Course Collaboration

Project Authors: Sanna Vainikainen, Ruut Matilainen, Daniil Molodichenko and Elmeri Lehtomäki

Tutors: Sirpa Ryynänen and Laura Pakarinen, Senior Lecturers

Product Design: Kaisa Valtakari / Dimex Oy
Product Pattern Design: Assi Moilanen/ Dimex Oy

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SASTA X Savonia School of Design

From fibers and products to pixels – the transformation of outdoor fashion from physical to virtual

Blogilinkki

"The compatibility and functionality of different software is important, which makes it easy to transfer and update data from one software to another."
- Kirsi Kärkkäinen, Product Manager, Sasta Oy

R&D, Circular Design, Monomaterial Technology & Digital Product Development, Wearable Design and Fashion Course Collaboration 2021

Project Authors: Iida Pitkänen, Digital Fashion Design
Co-Authors: Taija Kokkonen, Katariina Weeman, Aurora Myyryläinen, Pinja Lievonen, Laura Kurikka ja Katriina Sormunen
Tutors: Laura Pakarinen and Jarno Räsänen, Senior Lecturers

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SASTA X Savonia School of Design

Designing monomaterial products and recyclability – Tools for the future in functional fashion

Blogilinkki

"The most important aspects of this project were the design of a long-lasting product, taking into account recyclability and disassembly and zero waste."
- Jenni Kemppainen & co-authors, 2021

Jenni Kemppainen, Digital Fashion Design

and Co-Authors: Erika Nygrén, Oona Pappila, Juha-Matti Puljujärvi, Milla Savinainen and Melina Turunen

Tutors: Laura Pakarinen and Jarno Räsänen, Senior Lecturers

R&D, Circular Design, Monomaterial Technology & Digital Product Development, Wearable Design and Fashion Course Collaboration 2021

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SAIREX x Digital & Circular Fashion House

SMEs textile and fashion companies - steps towards digitalization

Blogilinkki

"This internship project reinforced the idea that digital clothing design is what I want to focus on in the future. However, this also requires studying traditional clothing design, as digitalisation cannot be fully utilised if you do not know the basics."
Taija Kokkonen, Product Author 2021

R&D, Digital Production Technologies,
Case: Digital Patterns and Pattern Cutting

Authors: Taija Kokkonen, R&D, Digital Product Development and Manufacturing Process

Tutors: Sirpa Ryynänen, Senior Lecturer

Product & pattern design: Sairex Oy / Health Care products

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SATU NISU DESIGN X Savonia School of Design

An exploration of future fashion thinking – Digital fashion collection for Satu Nisu Design

Blogilinkki

"You wouldn't believe how much thought work is required to back up the products!"
-Project Designers

R&D, Digital Fashion and Product Development, Collection Design Course Collaboration

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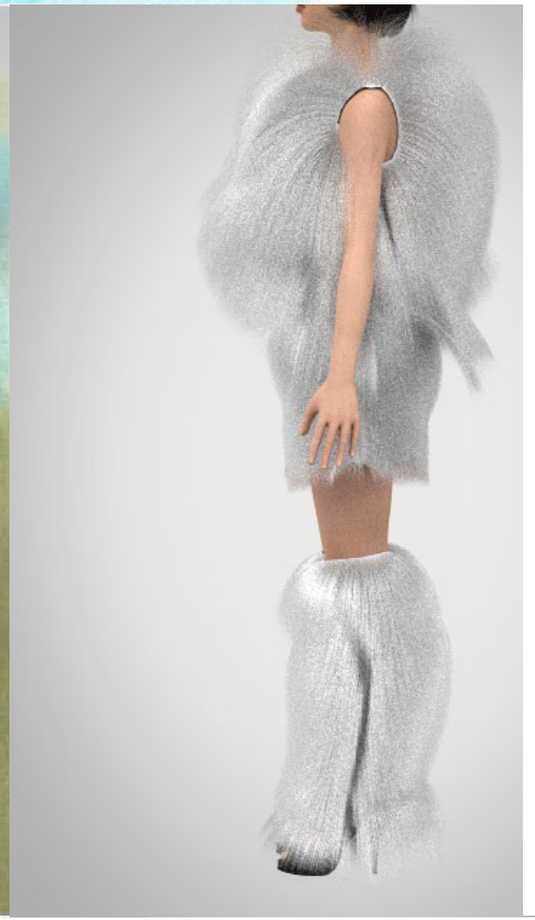
Project authors: Emmi Koponen, Sanna Vainikainen and Atte Korhonen, Allessandro Ciaranfi , Digital Fashion design

Tutors: Sirpa Ryynänen and Laura Pakarinen, Senior Lecturers

Virtuaalinen muoti



Design Karoliina Soronen ja Ilona Rautiainen, Savonia-amk

Haasteet

- Rahallinen ja ajallinen resurssi 3D-prosesseihin siirtymiseen
- Skaalaus yrityksen eri prosesseihin
- Renderöindi vie aikaa, vaatii myös paljon koneelta
- Värikommunikaation realistisuus
- Digitaalisten tekstiilimateriaalien ominaisuuksien haasteellisuus ja realistisuus

Haluatko tietää lisää? Ota yhteyttä!

https://digitalcircularfashion.savonia.fi/

Tule kanssamme mukaan rakentamaan
tekstiili- ja vaatetusalan yhteisöä discord
palvelimellemme:

https://discord.com/invite/XufGayX2Bn

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3D-ohjelmia

- Clo3D https://www.clo3d.com/en/
- VStitcher https://browzwear.com/
- Assyst https://www.assyst.de/en/index.html
- Style3D www.style3d.com

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