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Stadio Conference 2022

Panel 3: Revitalising curriculum for 21st century relevance

The hybridisation of fashion technologies in fashion media studies

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KEYWORDS
- Fourth Industrial Revolution (4IR)
- Vocational Education (VE)
- Fashion Media Studies (FMS)
- Fashion Technologies

Key points

- **It is imperative to develop vocational fashion media curricula that provide students with the skills necessary to succeed in the rapidly developing fashion technology industries.**
- **Acquiring 21st-century skills demands the integration of fashion technologies into the modern fashion media curriculum.**
- **With the advent of modern technology and the changing nature of the workforce, the South African educational system has begun to adjust itself to the realities and expectations of the future.**
- **Challenges are to identify the types of technology, including software programs, hardware devices and internet interfaces, that the fashion industry will need to determine and facilitate the skill levels necessary to be competitive.**

Figure 1: GIF generated image. (2022) Fashion Technology.

CULTIVATING TECHNOLOGICAL SKILLS USED IN A RAPID EVOLVING FASHION MEDIA INDUSTRY

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Tech In Fashion:
Introducing The Data Dress By Google & Ivyrevel

- There is a need for continued investigation into digital transformation of both VE (teaching methods, education, platforms, digital platforms, modern IT, AI and VR) and current technologies used in the fashion industry.

- To identify what new technology, new digital business models and what fashion media students must learn to be able to adapt.

- Kalbaska & Cantoni (2019) assert that eminent growth and advances in the fashion industry necessitate the need for designing curriculums aiming to cultivate students' skills using a wide range of digital platforms to expand their effectiveness and responsiveness to dynamic market needs.

- Students are facing prospects of "finding employment at the end of their studies in industries or job roles that do not yet exist" (Lizamore, 2017:18).

- It is argued that "education and training in the 4IR-shaped future should aim to develop in learners high-level, high value-adding skills" when entering the market (Gleason, 2018:36).
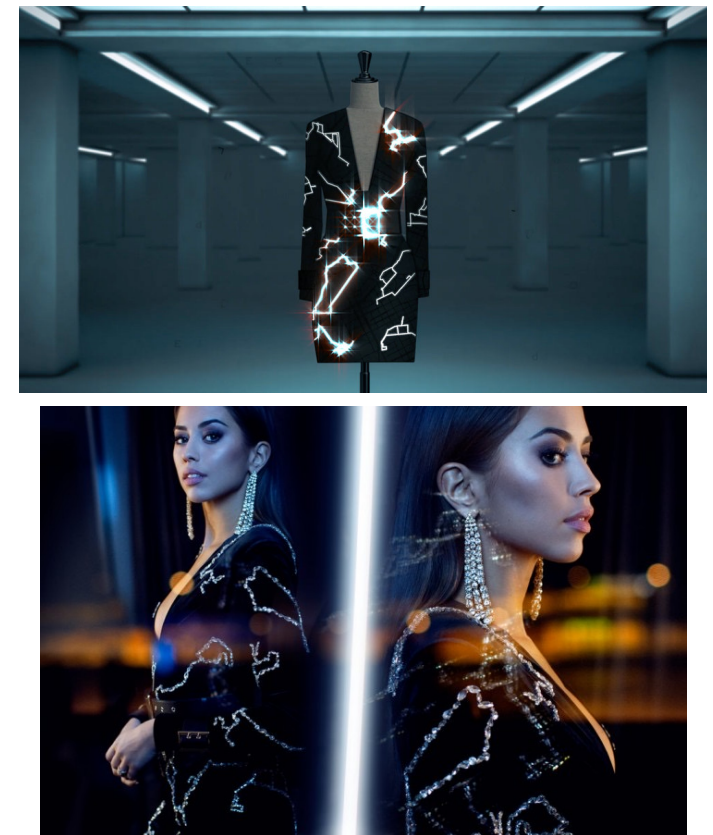

Figure 2: Google (2022). The Data dress by Google.

THE INTEGRATION OF MULTI-LEVEL PARTNERSHIPS IN THE AFRICAN EDUCATIONAL SYSTEM

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- **The South African educational system has begun to intentionally adjust itself to the realities and expectations of the future world of work.**

- **Most recent research conducted by Adelabu (2020), shows that the South African government has initiated multi-level partnerships to integrate the 4IR into the educational system in order to develop students' skill sets.**

- **These include the Presidential Commission on 4IR, the Agenda for the 4IR in South Africa (4IRSA Partnership) and the Ministerial Task Team on the 4IR in Post-school Education and Training.**

- **More globally, the Asia Pacific Economic Cooperation (APEC) Education Strategy Action Plan sanctions multidimensional cross-border relationships and collaboration between higher educational institutions in the regions.**

- **Penphrase (2018) postulates that any modern curriculum should equally consider how the human condition, new technologies and shifting economic power affect individuals of all financial levels, and the dangers that exist inside a world that is increasingly interconnected, to cultivate profound intercultural understanding and a withstanding regard for opportunity and common liberties.**

Figure 3: HOT SECOND (2021). Carlings metallic tracksuit.
Figure 4: The Fabricant (2021)Digital Couture Dress.

**Left: A metallic tracksuit created by Carlings that was available for exchange at the pop-up store.
Right: The world's first digital couture dress which sold for $9,500 USD (Courtesy of The Fabricant)**

THE INTEGRATION OF FASHION TECHNOLOGY IN FASHION MEDIA COURSE DESIGN

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3D Printing Fashion Collection by Preleg

- In fashion studies, it is imperative that online activities relate to the world of work, and FMS should have both skills and content to support this as part of the curriculum. Innovative course design should support knowledge transmission and skills acquisition (Heinerichs et al., 2016).

- Experienced academic managers at all levels and a clearly communicated vision are necessary for change to take place at the wider institutional level.

- In this context, enough room for informed discussions as well as workshops and training opportunities are necessary, allowing both beginner and more advanced scholars to share practices and address concerns.

- This is vital to get a broader set of potentially interested professionals and academics involved rather than just the 'early adopters' (Bryant, 2018).

Figure 5: Preleg (2021) Digital Collection.

FASHION MEDIA STUDIES INTEGRATION OF MODERN FASHION TECHNOLOGIES

- **The learning outcomes of the modern curriculum should integrate an in-depth understanding of strategic applications of social media platforms and technical skills required in the fashion industry.**

- **Communication abilities play a curial role in the fashion industry as new entrants are pioneering new visual and digital media as imaginative ideas are communicated through digital channels which require writing skills and online platforms to create online content.**

- **The digital revolution has contributed to the emergence of new forms of communicating fashion, making fashion films a relevant and widely broadcasted genre.**

- **Types of conveyance move from promotional spots in cinemas to web-based media (Facebook, Twitter, Instagram), video platforms (YouTube, Vimeo, TikTok), fashion film platforms (Nowness, ShowStudio, Bokeh), or TV fashion channels (Fashion TV).**

- **Editing content for FMS is a vital skill needed in the fashion industry and practical skills associated with digital platforms for editing and creating visual content are crucial.**

Figure 7: Preleg (2021). Digital Collection.

FASHION MEDIA STUDIES INTEGRATION OF MODERN FASHION TECHNOLOGIES

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3D Printing Fashion Collection by Preleg

- To prepare students, FMS curricula must introduce social media systems and their associated digital platforms used by social media influencers to create content using XR, AR and other fashion technology as part of the portfolio of a fashion media practitioner (Park et al., 2016, SanMiguel et al., 2015).

- Being a fashion media practitioner requires communicative, analytical and creative skills, but also knowledge of platforms at operational levels which will have a practical impact on redesigning the modern vocational curriculum.

- Challenges in this domain are to identify the types of technology, (including software programs, hardware devices and internet interfaces), that the fashion industry will need to master and to determine the skill levels necessary to be competitive.

- Griffin (2022) hypothesises that the fashion development process is accelerated through 3D software and fashion schools should invest in them.

- Data analytics courses should also be offered in fashion schools across Africa.

- By utilising analytics, fashion entrepreneurs, brands, and retailers will improve their pricing and forecasting strategies.

- This will facilitate students' learning of new technologies such as NFT's, 3D digital design and XR.
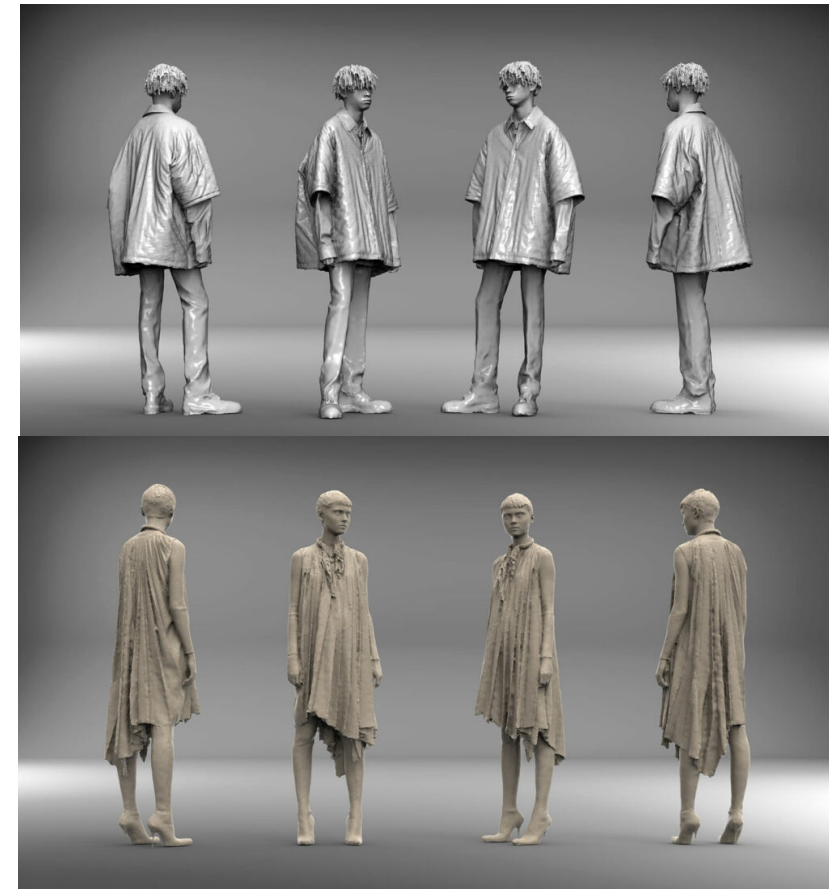

Figure 8,9: Preleg (2021). Digital Collection.

MODERN FASHION TECHNOLOGIES EXAMPLES

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Students should be able to create an AR filter using software like Vuforia Engine, LivShows, Unity 3D and Spark AR.

Digital ID's:

- Ground breaking new concepts were introduced at the BOF New Frontiers in Fashion and Technology summit.

- Brands should develop a digital ID for physical products.

- Connects digital ID's to actual garments, so if you are e-commerce or fashion brands with physical garments, you can actually see the lifecycle of the garment after it leaves the store using the digital ID.

Digital ID's: EON a game changer
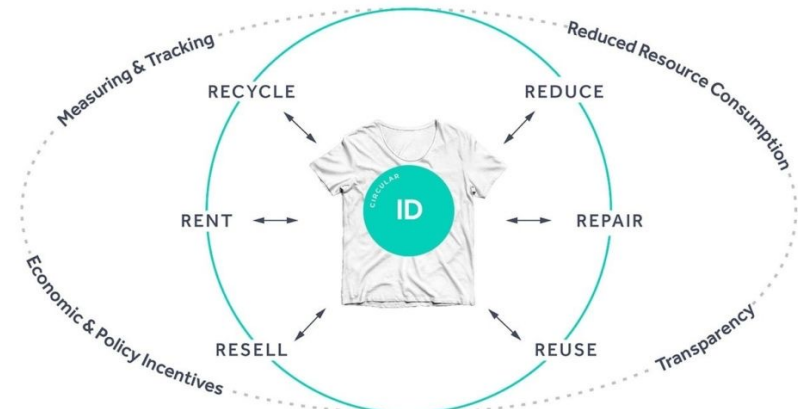
Figure 9 : EON (2022). Eon's Digital ID

MODERN FASHION TECHNOLOGIES EXAMPLES

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- **3D Tech will enhanced customer experience.**

- **3D technology has introduced shoppers to an entirely new world of immersive and interactive digital experiences.**

- **Using 3D software like GLO3D and 3D augmented reality creation platforms like LivShows, fashion brands can develop 3D garments that give customers a detailed look at clothing that 2D images can't.**

- **Digital fashion is a 3D rendered garment that only exists virtually. Using 3D software, designers can dress avatars in 3D clothing or create overlays on persons or images.**

Users can dress a virtual mannequin. Snapchat.
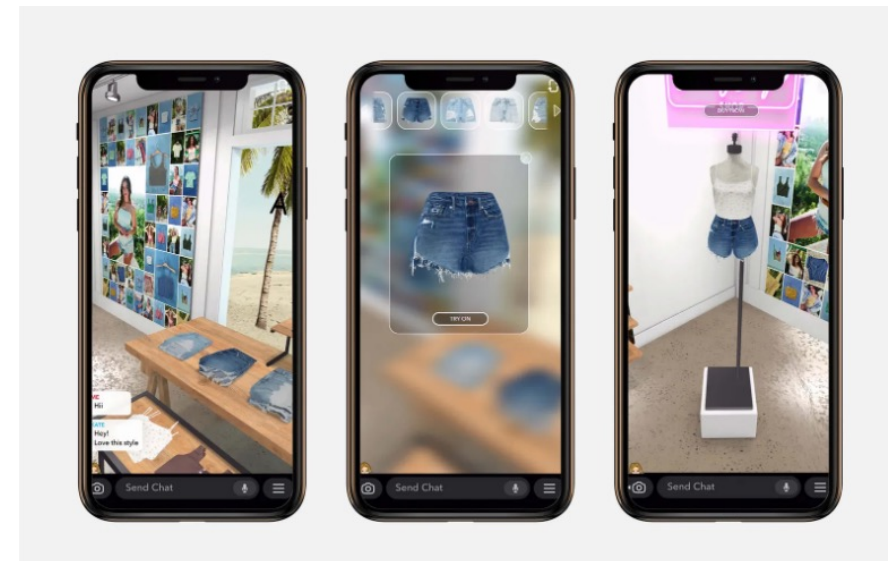
Figure 10: Vogue (2022). Snapchat Fashion Filter

MODERN FASHION TECHNOLOGIES EXAMPLES

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Augmented Reality (AR)

AR Filters:

- Augmented Reality allows your audience to learn, discover and experience your brand in new ways using AR filters, Instagram filters in your fashion brand.

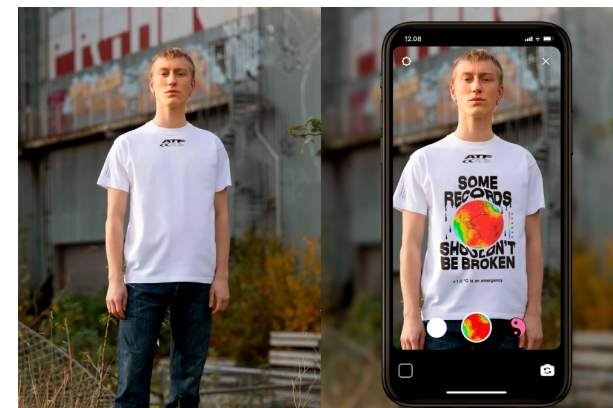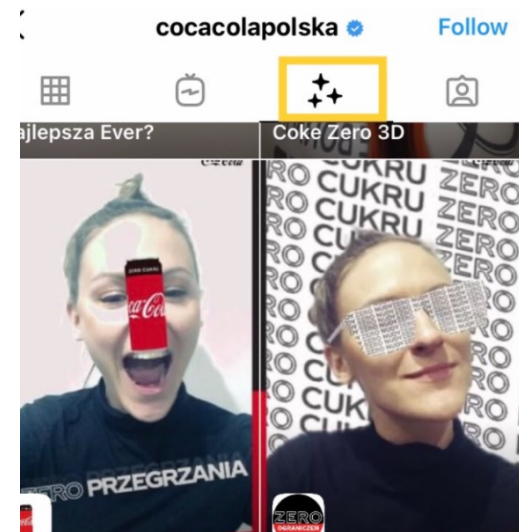- We are going to see this trends of AR being used for fashion.

Figure 11 Instagram (2022) Cocacolapolska

MODERN FASHION TECHNOLOGIES EXAMPLES

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Snapchat users will now be able to try on clothing, glasses, purses and bracelets virtually.

Farfetch, Prada, Piaget and GAP are among early adopters of the new tools.
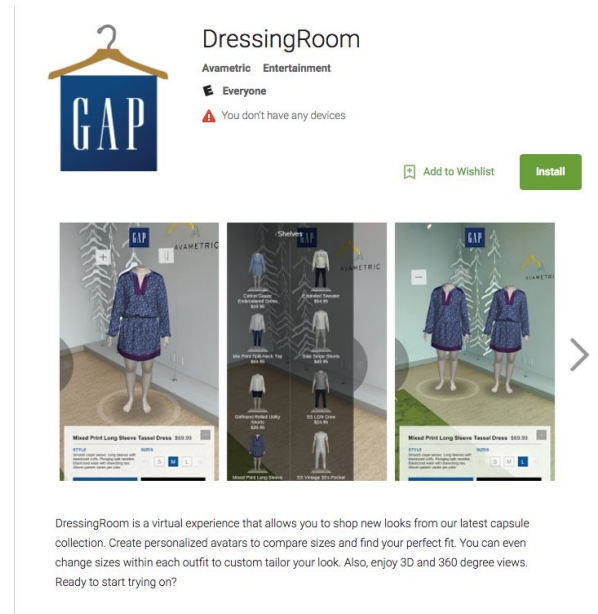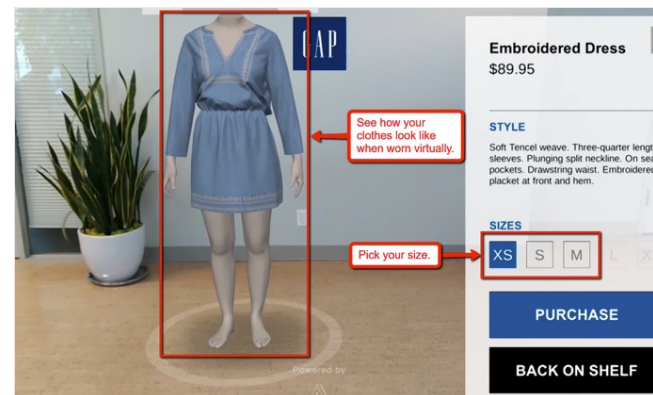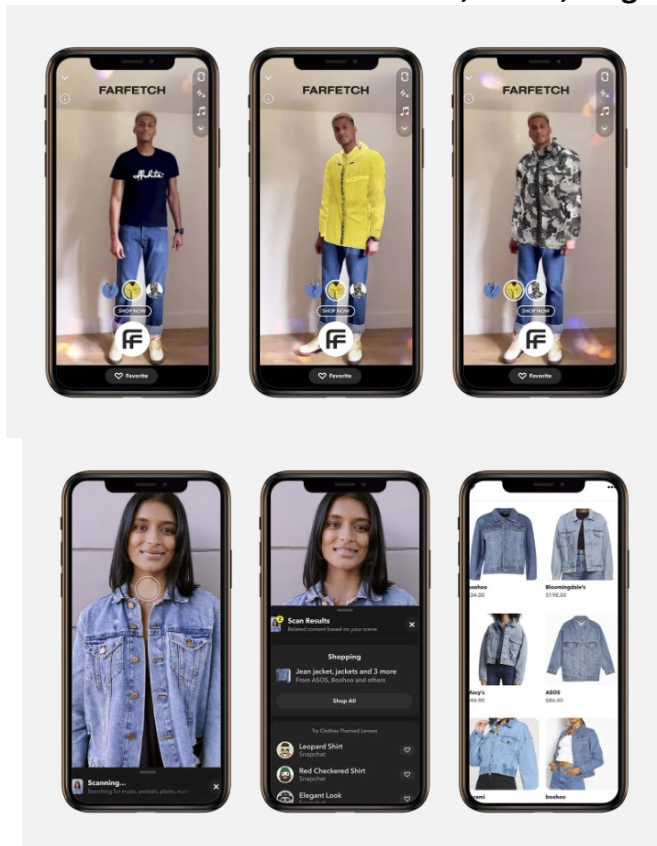

Figure 12, 13: Snapchat (2022). AR filters used by Prade and Piaget

Figure 14, 15: Snapchat (2022). AR filters used by Prade and Piaget

MODERN FASHION TECHNOLOGIES EXAMPLES

Gvasalia's from Balenciaga 3D printed jackets have been noted for their hourglass silhouettes.
Baleciaga human 3D scanning: **Cardi B in 3D-printed Balenciaga:**

Figure 16, 17:: Balenciaga (2022). AR filters used by Prade and Piaget

MODERN FASHION TECHNOLOGIES EXAMPLES

Dior, in collaboration with Instagram, developed a Sunglass filter that allowed consumers to try on their new product.

Figure 18, 19: Dior (2019). AR Sunglass filter used by Dior

MODERN FASHION TECHNOLOGIES EXAMPLES

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The World's Smartest Artificial Intelligence Just Made Its First Magazine Cover for Cosmopolitan Magazine.

Artificial Intelligence (AI)
DALL-E2

Figure 20: Cosmopolitan (2022).. AI Magazine cover.

CONCLUSION

- **Penphrase (2018) puts forward that 4IR puts a premium on versatility and in self-coordinated learning and thinking.**

- **The timeframe of realistic usability of any aptitude in the present-day condition has increasingly shortened.**

- **Requiring future fashion media practitioners to persistently refresh their abilities and develop and implement new innovations and new enterprises that might not have existed while they were studying.**

- **Overall, evolving fashion technology demands acute changes in fashion schools which embody critical engagement following the paradigm of changes in curriculum and learning design.**

- **A modern approach should be developed by identifying and comparing current technologies used by the fashion industry and examining possible directions for future development.**

- **Further research to examine how fashion studies are taught in relation to these technology platforms and attempts to outline practical ways in which these technological platforms might be applied in fashion studies are critical in order to provide learners with work-ready skills.**
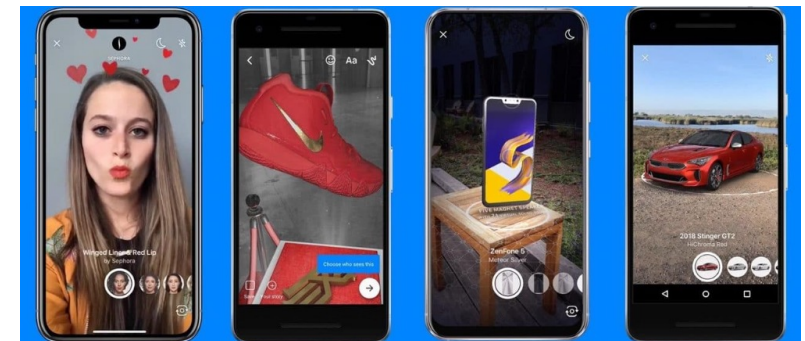

Figure 21: Instagram (2022) AR Filters..

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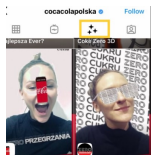
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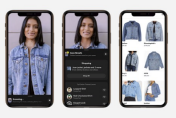
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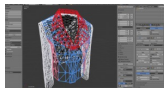

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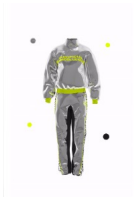
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