

**Exploring the Application of Artificial Intelligence (AI) to Clothing Construction: Its Benefits and Challenges Faced by Students of Fashion and Design, Yaba College of Technology, Lagos**

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***Abstract***

*The study on exploring the application of (AI) Artificial Intelligence to clothing construction: Its benefits and challenges faced by students of fashion and design in Yaba College of Technology Lagos, was conducted among 150 respondents randomly selected from 200 members. Two hypotheses were formulated and a (29) twenty-nine item questionnaire was the main instrument used to collect data for the study. The statistical tools used were frequency count, percentages, mean and Friedman's test, 129 (86%) answered Yes that (AI) artificial intelligence has helped to reduce time wastage. 111 (74%) answered yes that style poorly sketched can be edited using AI, 138 (92%) answered yes that AI is perfect in creating intricate abstract. 116 (77%) answered yes that pattern can be manipulated using AI, 87 (58%) answered yes that AI not included into the curriculum, 109 (73%) answered yes that traditional clothing construction process is yet to be developed to integrated AI technology. 100 (67%) answered yes that the fashion industries themselves have not integrated AI into the industry. In conclusion, AI reduces time wastage, improve work efficiency, create intricate abstract and helps in manipulation of patterns. In view of the forgoing, the following recommendations were made: AI, technology to be included in the curriculum, the fashion industry to fully integrate the technology and there should be collaboration between the Yaba College of Technology and the fashion industry for better understanding of the application by students.*

**Keywords:** Application, Artificial Intelligence, Benefits, Challenges, Students

**Introduction**

Clothing is one of the most important three basic needs of man. Clothing construction is an art that requires sewing skills essential to convert the design on paper into garment and accessories which appeal to the emotions and are attractive to the eye. It is one of the courses taught to students of fashion and design. The aim of teaching clothing construction skills as opined by, Obiana, Fadipe and Ojiude (2022) Tracey, (2019). is for students to have good business sense, creativity, artistic ability, sense of style, colors to compliment a garment,

knowledge of current fashion trends, strong visualization skills, computer skills such as how to use computer aided design (CAD) programs and be familiar with any graphic editing software that could help improve the designs, also decision making skills and be detail oriented by having eye for small details that can make a design successful. With the introduction of (AI) Artificial Intelligence technology, these skills that were taught manually becomes easier. Artificial Intelligence is the dawn of a new era. (Leo, Franklin and Edmundo 2023). Traditionally, clothing construction is a creative process involving lots of trial and error. (Scott, 2023). The creative realm is making the application of Artificial Intelligence, AI in the development of clothing possible and less tedious both in academia and the fashion business in various ways. Designers can say good bye to endless magazines, browsing and social media scrolling. (Wooju, Seyoon & Sungehan 2023). The fashion industry is notorious for its sustainability shortcoming during production, particularly straining water resources, as a result of inadequate treatment post use, resulting in heavy metal and micro plastic pollution in water sources leading to health problems among consumers. It is also marred by labor-exploitation, transportation of clothing and accessories further worsened by greenhouse gas emissions, also the fast fashion model has increased production and disposal of clothing resulting in waste generation and unsustainable resource consumption as a result, the industry is finding solution and tools to achieve sustainable goals using AI and so should students of fashion and design. (Leo, Franklin, & Edmundo, 2023). With the emergence of globalization, AI has gained attention to connect businesses globally (Chandadevi, Sheenam, Xianyi & Pascal, 2019).

AI in clothing design started from image recognition and synthesis to image generation. Many (IT), information technologies companies have developed and possess AI-based style GAN2 (Improved image manipulation technology) to transform image helping to increase work efficiency. GAN has attracted attention recently in AI technology because the Model is an unsupervised deep learning method that generates or edit new fake images and used in clothing design to generate new designs, modify parts of the design, create graphics printed on clothing. Another GAN family is the Disco GAN technology that identifies the characteristics between two designs. The network architecture and styles can be controlled by utilizing style GAN or style GAN2 to generate clothing images and enabling the editing of clothing for specific attributes (Woojin, Seyoon & Sungehan 2023). Platforms such as ChatGPT, DALL-E2 which is a notable example that allow for more accurate predictions of upcoming fashion trends, enabling efficient inventory management thereby allowing the application of AI to incorporate the design process of human designers and fashion domain knowledge to increase work efficiency which has been relying traditionally on design intuition for decision making. (ZX, WK & MinLi 2011). AI tools like MJ, DALL-E and Starryai are used for generating symmetrical and repetitive structures such as dots, square and checks (Gino 2021). There is the New Black tool which has the ability to consistently generate unique designs which is originally allowing the designers creative to remain at the forefront and caters for cutting edge

footwear and luxurious handbags to elaborate 3D printed wedding dresses. Also, facilitate collaboration among creators for efficient brand development.

Yes, PLZ introduces an interactive visual discovery tool that allows customers engagement including style, fit, design and mood. These enhance online shopping experiences, making it more engaging and tailored to individual preferences. Virtual Hound tailored for prototyping allowing designers to keep abreast with trends in style and pattern with greater agility and precision designs before production. Botika is a software platform designed for online apparel retailers to produce hyper-realistic clothing product photos, reducing the need for traditional photo shots, thereby saving time and cost and complete the leading e-commerce platforms (Frances, 2023, Alex 2024). ZMO AI generates high quality on model images allowing consumers to visualize their products on models reducing the needs for photographs, models, studios and post-processing in real time. CALA is a leading fashion supply chain interface, integrating design development, production and logistics into single unified digital platform fostering creativity and originality in design. Priscille (2023) noted. Design novel which focuses on trend forecasting and design recommendation all powered by its advance fashion AI world. Tee AI perfect for creating custom t-shirts for personal use generating unique designs for merchandise and quickly crafting high-quality designs for events or promotions. Fashion Advisor AI, provide answers to their fashion related queries such as individual preferences, body types and styles utilizing machine learning algorithms, valuable for designers staying abreast of latest trends and making fashion informed choices. (Alex 2024). Retail experience enhanced using AI tools like chatbots which provides personalized recommendations, answer questions and help provide insight into shopping, behavior and preferences (Scott, 2023).

There is Stylerisa, a B2B (Business to Business) software that employs AI in image consulting to analyze photo and recommend best colour suitable for the skin tone, resulting in fewer returns and contributing to the company's sustainability. In fashion merchandizing AI-driven tools the Augmented and Virtual Reality (AR and VR) allow online shoppers to fully comprehend what a garment looks like on them using certain apps. Dupe killer, a tool to detect counterfeiting, helping customers, officials and others along the supply chain to spot fakes (Shemona 2023). Stitch fix is a personal styling tool which creates customized style profiles for each customer. Based on these profiles, stitch fix stylist selects clothing items to send to each customer (Bertagnoli, 2022).

With the knowledge of the application of these AI software, the fashion and design students stand to benefit fully, knowing that the world of fashion is evolving and the fusion of creativity and technology opens up unprecedented avenues for student designers with the latest revolution being AI (Artificial Intelligence) transforming how to conceive, create and

customize fashion. AI is not just a tool but a creative partner that offers endless possibilities to those who dare to imagine and innovate (Alex, 2024), Scot (2023) noted that AI is used to perform tasks such as cutting and sewing fabrics, generate design concepts based on inputs such as colour, fabric and style, saving the designers time and effort in refining the designs rather than starting from scratch. AI is used to produce personal apparel with the Internet of Things (IoT) (Scott 2023). Automated product tagging, done manually such as size, colour and style has been automated using AI for accurate and consistent information, this improve efficiency in management of inventory, (Ilias, Lazaros & Elias, 2020). Customization is possible with AI in which fabric selection, style matching, garment design, board drawing and garment production is done organically according to customer's requirement. So consumers must be satisfied by giving them comfortable experience with less sustainability in the market (Jia & Ying, 2022, Shuo & Xia 2022).

In clothing design, designers collect, sketch, experiment, which trigger inspiration, images, primary generators for framing design directions to require decisions and when they encounter design fixation AI-based CST can play a significant role during ideation, exploration and evaluation by offering feedback. During styling students can compare and analyze the before and after difference to determine if the fashion AI recommendation model embodied their planned style. Hyosun and Minjung, (2023) observed that, in the AI – assisted design process, designers can develop new designs inspired by future trends predicted by AI-powered search engines. The AI algorithms have created new design alternatives for denim jackets as well as optimize their production and manufacturing processes. (Garim & Hye-young, 2024). AI can be a powerful tool when designing patterns to print on fabric and garment, thus empowering designer's creative potentials and also allows precise patterns to be made and applied to a garment for use, to dress up mannequins linking designer's ability as a prompt designer. AI is perfect in creating more intricate abstract figures like patterns with natural elements, animals and plants useful in textile design (Gino 2021). AI, enable prediction, classification, identification, evaluation and partial design automation, assist fashion designers through machine learning to input and output large data from professionals or users generated images from social media platforms, editorials or runways, company websites, databases and textual garment or style description commissioned from fashion experts (Abusadat, Ponmi, Al-Hussein & Tracy 2022).

AI can be used to sort fabric by color, texture, customer, in energy management, quality and control and defect detection as well as pattern manipulation. By reducing time and cost associated with manual cutting, reduce fabric waste and increase efficiency in pattern grading (Akash 2023). However, AI (Artificial Intelligence) can also pose a challenge to users. Chandadevi, Sheenam, Xianyi & Pascal (2019) noted that, the fashion industry lacks the extensive adoption of AI methods based on classical algorithms and modern AI techniques are confined to academic research. To have a competitive advantage and to make the business

profitable then AI must be adopted (Jia, Wei & Ying 2022). Hysosun and Minjung (2023) opined that, student's participation is limited to collection and classification of fashion image data sets, it is therefore difficult for students to use AI technology within the overall clothing design process.

Except the traditional clothing design process is developed in a systematic fashion design hands-on activity to integrate AI technology for better understanding of students, that will enhance their capacity in the classroom as future designers who will effectively integrate diverse information and create innovative designs, this must be developed within the curriculum. Besides, earlier AI tools developed often produced random images or provide excessive information that does not align with the intended design concept. Applying AI technology to fashion education presents a challenge for the educational system which needs to be researched and implemented independently (Shuo & Xiaoyu, 2022). The limitation of AI technology in the fashion industry is that it needs to be continuously trained for new fashion trends. In addition, a supervised learning data set for the life style of the MZ generations (Millennia & GenZ population) through an industry-university collaboration is necessary. This real-world fashion industry issue has emerged as an opportunity for academic research student learning and improvement (Shuo, Xiaoyu, 2022, Hyosun & Minjung 2023). No study has been conducted focusing on the way AI in the design process affects consumer's perception of the production and the subsequent evaluation and consumer's response to AI design technology are yet under researched from various perspective, there is plenty room to investigate how and why generative AI in the fashion design process impacts consumer's product and brand evaluation (Garin & Hye-Young, 2011).

When using AI for pattern inspiration, the precise detail of AI text-to-image system must be given whether floral or graphic if any detail is left out intentionally or not, it may fill them in of its own (Garin 2021). AI cannot achieve human-level creativity except those creative skills are explored and built and making the right partnership with industries (Shemona 2023). Rapidly changing fashion trends on an unpredicted pace making it challenging for designers and retailers to predict consumer preferences accurately, inventory management and often struggling with stock out or excessive inventory. Marketing and advertising reaching the target audience with effective marketing strategies is a significant challenge especially in this digital age with multiple platforms and channels. By harnessing the power of AI fashion and design students as entrepreneurs cannot only survive but thrive in an increasingly competitive landscape using AI solutions to data-driven solutions to enhance personalization and stay at the forefront of trends (Akash 2023).

### **Statement of the Problem**

The traditional clothing design process is not developed to integrate AI (Artificial Intelligence) technology to the understanding of the students that will enhance their capacity

in the classroom as future clothing designers. The fashion industry lacks the extensive adoption of AI methods and modern AI techniques are confined to academic research. When using AI technology for pattern inspiration the precise detail must be given else the technology will input any information for the designer because AI cannot achieve human creativity. Therefore, AI technology needs to be continuously trained for new fashion trends. These and many more will be discussed in this research.

### **Purpose of the Study**

The main objective was to explore the application of (AI) Artificial Intelligence to clothing construction. Its benefits and challenges faced by students of fashion and design in Yaba college of technology, Lagos. Therefore, the following objectives were formulated to:

1. Examine the benefits of the application of (AI) Artificial Intelligence in clothing construction by fashion and design students in Yaba college of technology, Lagos.
2. Examine the challenges faced by fashion and design students in the application of (AI) Artificial Intelligence in clothing construction in Yaba college of technology, Lagos.

### **Research Questions**

1. What are the benefits of the application of (AI) Artificial Intelligence in clothing construction by students of fashion and design in Yaba college of technology, Lagos.
2. What are the challenges faced by fashion and design students in the application of (AI) Artificial Intelligence in clothing construction in Yaba college of technology, Lagos.

**Null Hypothesis 1:** There is no significant difference between the application of artificial intelligence (AI) to clothing construction and its benefit to fashion and design students in Yaba College of Technology, Lagos.

**Null Hypothesis 2:** There is no significant difference between the application of artificial intelligence (AI) to clothing construction and the challenges faced by students of fashion and design in Yaba College of technology, Lagos.

### **Methodology**

The design adopted for the study was a descriptive survey. The area of study was Yaba College of Technology. The population consisted of 200 in which 150 respondents were randomly selected. A purposive sampling method was adopted for the study because the subject fit the profile of the people the researcher wanted to meet. A structured questionnaire was the main instrument used in the collection of data for the research, in which respondents were to answer Yes or No. The questionnaire was divided into two sections. Section A and B. Section A was on the bio-data of the respondents, while Section B had 29 items. 16 were on the benefits of AI (Artificial Intelligence) in clothing construction, 13 on the challenges faced by the

respondents in the application of this technology. The questionnaire was given content and face validity by 2 lectures in fashion and design department, Yaba College of Technology, Yaba. Reliability of the instrument: the test re-test reliability test was used by the researcher to 20 respondents in the department. Their lecturers were the research assistants. All the questionnaires were collected. Data collected was analyzed using frequency counts, percentages, mean and Friedman's test. The results are presented below.

**Null Hypothesis 1:** There is no significant difference between the application of artificial intelligence (AI) to clothing construction and its benefit to fashion and design students in Yaba College of Technology, Lagos.

**Table 1: Application of Artificial Intelligence (AI) to clothing construction and its benefits to fashion and design students in Yaba Collage of Technology, Lagos**

S/N	Variable (n=150)	Yes (%)	No (%)	Mean Rank	$\chi^2$ (p-value)
1	AI is the new technology for students of fashion design	141(94)	9(6)	7.47	194.89* (<0.001)
2	AI has helped to reduce time wastage during clothing construction	129(86)	21(14)	8.11	
3	Traditional clothing construction process is tedious and time consuming	120(80)	30(20)	8.59	
4	Clothing construction student can now say goodbye to fashion magazines and their likes	120(80)	30(20)	8.59	
5	AI has help in the reduction of carbon dioxide emission by students through sustainable practices during shopping for practical	70(47)	77(53)	11.26	
6	The application of AI in clothing construction has increased work efficiency for students	124(83)	26(17)	8.38	
7	Style poorly sketched can be edited using AI	111(74)	39(26)	9.07	
8	Style fit, design and mood of customers can be done using AI	114(76)	36(24)	8.91	
9	Students of clothing construction can use AI to forecast	119(79)	31(21)	8.64	
10	Fabric colour to match skin tone can be done using AI	135(90)	15(10)	7.79	
11	This helps to reduce waste	138(92)	12(8)	7.63	
12	Counterfeiting of clothing products can be detected using AI	119(79)	31(21)	8.64	

13	AI is perfect in creating more intricate abstract for clothing students	138(92)	12(8)	7.63
14	Assisting students to input and output data from professionals can be done using AI	132(88)	18(12)	7.95
15	AI can be used by students to manipulate patterns to reduce time and cost	116(77)	34(23)	8.80
16	AI offers endless possibilities to students who are creative and innovative in clothing construction.	121(81)	29(19)	8.54

\*p-value significant at 5% level

A Friedman's test was conducted on the application of Artificial Intelligence (AI) in clothing construction for fashion and design students in Yaba college of technology, Lagos. The test statistic value (194.89) from the results in Table 1 reveals that the hypothesis was rejected ( $p < 0.05$ ) and this deduces that application of Artificial Intelligence (AI) in clothing construction will significantly benefit the fashion and design students Yaba College of Technology, Lagos.

**Null Hypothesis 2:** There is no significant difference between the application of artificial intelligence (AI) to clothing construction and the challenges faced by students of fashion and design in Yaba College of technology, Lagos.

**Table 2: Challenges faced in the application of Artificial Intelligence (AI) by students of fashion and design during clothing construction Yaba College of Technology Yaba, Lagos**

S/ N	Variable	Yes (%)	No (%)	Mean Rank	$\chi^2$ (p- value)
1	AI technology has been included in curriculum for clothing construction	87(58)	63(42)	7.92	74.70* ( $< 0.001$ )
2	Traditional clothing construction process is yet to be developed to integrate AI technology in clothing construction	109(73)	41(27)	6.97	
3	This will create a problem for students of clothing as future designers	81(54)	69(46)	8.18	
4	The fashion industry themselves where students will function as entrepreneurs have not fully integrated AI into the industry	100(67)	50(33)	7.36	
5	There should be collaboration between Yaba college of technology and the fashion industry	122(81)	28(19)	6.40	
6	This helps in better understanding of the application of AI by students	120(80)	30(20)	6.49	



7	AI cannot achieve human level of creativity	101(67)	49(33)	7.31
8	This is because they are not humans and human creativity has not been built into the technology	114(76)	36(24)	6.75
9	The rapidly changing fashion trends are making it difficult for clothing students to predict the next trend	104(69)	46(31)	7.18
10	Consumer preferences cannot be accurately predicted using AI by students	123(82)	27(18)	6.36
11	Reaching the target audience as student clothing entrepreneur using AI is a challenge	120(80)	30(20)	6.49
12	AI platforms for advertising are numerous	118(79)	32(21)	6.58
13	Traditional clothing construction methods and AI tools should be harnessed for effective results for clothing entrepreneurs to be at the fore front of trends	108(72)	42(28)	7.01

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*\*p-value significant at 5% level*

A Friedman's test was conducted on the challenges faced in the application of Artificial Intelligence (AI) by students of fashion and design in Yaba college of Technology, Lagos. The test statistic value (74.70) from the results in Table 2 shows that the hypothesis was rejected ( $p < 0.05$ ) and this infers that there are significant challenges faced in the application of Artificial Intelligence (AI) during clothing construction by the students. Some of these challenges are: AI technology has not been included in curriculum for clothing construction, traditional clothing construction process is yet to be developed to integrate AI technology, no collaboration between Yaba College of technology and the fashion industry, and AI cannot achieve human level of creativity.

## **Discussion of Findings**

### **Artificial Intelligence (AI) and its benefits in clothing construction for fashion design students.**

The Table reveals that out of 150 respondents, 141(94%) answered yes that AI, is the new technology for students clothing designers, 9 (6%) answered no, (Alex, 2024, Leo, Franklin, and Edmundo, 2023, Bertagizoli, 2022). 129 (86%) answered yes that, AI has helped to reduce time wastage during clothing construction, 21 (14%) answered no. (Akash, 2023) 120 (80%) answered yes that, traditional clothing construction process is tedious and time consuming, 30 (20%) answered no (scott,2023), 120(80%) answered yes that clothing construction student can now say goodbye to fashion magazines and their likes, 30(20%) answered no (Woojin, Seyoon and Sungehan,2023). 70(47%) answered yes that AI, has help in the reduction of carbon dioxide emission through sustainable practices by students shopping

for practical's, 77(53%) answered no. (Leo, Franklin, and Edmundo, 2023). 124(83%) answered yes that, AI application has helped in clothing construction to increase work efficiency for students, 26(17%) answered no (Ilias, Lazaros and Elias, 2020, Alex, 2024, Frances. 2023, Chandadevi, Sheenam, Xianyi and Pascal, 2019, ZX, WK, and Minli, 2011). 111 (74%) answered yes that, style poorly sketched can be edited using AI, 39(26%) answered no (Woojin, Seyoon and Sungehan, 2023) style fit, design and mood of customers can be done using AI, 114(78%) answered yes, 36(24%) answered no. (Alex, 2024, Frances, 2023) 119(76%) answered yes that student of clothing construction can use AI to forecast, 31(21%) answered no. (Alex 2024, Priscille, 2023), 135(90%) answered yes that fabrics colour to match skin tone can be done using AI, 15(10%) answered no (Jia and Ying, 2022, Shua and Xia 2022, Scott 2023, Shemona, 2023), 138(92%) answered yes that this helps to reduce waste, 12(8%) answered no (Hyosun and Minjung 2023), 119(79%) answered yes that counterfeiting of clothing products can be detected using AI, 31(21%) answered no (Shemona, 2023). 138(92%) answered yes that AI is perfect in creating more intricate abstract for clothing students, 12(8%) answered no (Ying.2022 Shuo and Xia, 2022).

Garim and Hye-Young (2024, Gino 2021) 132(88%) answered yes that AI assist student to input and output data from professionals. 18(12%) answered no (Abu Sadat, Ponmi, Al-Hussein and Tracy 2022). 116(77%) answered yes that AI, can be used by students to manipulate patterns to reduce time and cost, 34(23%) answered no (Akash, 2023) 121(81%) answered yes that AI offers endless possibilities to students who are creative and innovative in clothing construction, 29(19%) answered no (Chandadevi, Sheenam, Xianyi and pascal, 2019 Woojin, Seyoni and Sungehan 2023, Alex 2024, Gino 2021).

### **The application of the Artificial Intelligence (AI) by students of fashion and design during clothing construction.**

The Table reveals that out of 150 respondents, 87(58%) answered yes that AI, technology has not been included in the curriculum for clothing construction, 63(42%) answered no (Chandadevi, Sheenam, Xianyi and Pascal, 2019, Jia, Wei, and Ying , 2022, Shuo and Xiaoyu, 2022), 109(73%) answered yes that traditional clothing construction process is yet to be developed to integrate AI technology 41(27%) answered no (Hysosun and Minjung 2023), 81(54%) answered yes that, this will create problem for students of clothing as future designers (Hysosun and Minjung , 2023), 100(67%) answered yes that, the fashion industry themselves where students will function as entrepreneurs have not fully integrated AI into the industry, 50(33%) answered no (Jia ,Wei and Ying 2022, Chandadevi , Sheenam , Xianyi and Pascal, 2019) 122(81%) answered yes that, there should be collaboration between the college and the fashion industry , 287(19%) answered no (Shuo and Xiaoyu , 2022, Hyosun and Minjung 2023) 120 (80%) answered yes that, this helps in better understanding of the application of AI by students , 30(20%) answered no, (Shuo and Xiaoyu , 2022 , Hyosun and

Minjung 2023) 101(67%) answered yes that AI cannot achieve human level of creativity, 49(33%) answered no

Garim, (2021), Shemona, 2023) 114(76%) answered yes that , human creativity has not been built into the technology, 36(24%) answered no (Garim ,2021, Shemona ,2023) 104(49%) answered yes that , rapidly changing fashion trends are making it difficult for clothing students to predict the next trend , 46(31%) answered no (Shemona , 2023). 123(82%) answered yes that, consumer preferences cannot be accurately predicted using AI by students, 27(18%) answered no (Garim and Hye-Youn 2011) 120(80%) answered yes that reaching the target audience as students clothing entrepreneur using AI is a challenge, 30(20%) answered no (Akash, 2023), 118(79%) answered yes that AI platforms for advertising are numerous, 32(21%) answered no (ZX, WK, and MinLi, 2011, Gino,2012, Frances,2023, Alex, 2024) 108(72%) answered yes that traditional clothing construction methods and AI tools should be harnessed for effective results for clothing entrepreneurs to be at the forefront of trends, 42(28%) answered no (Woojin, Seyoon, and Sungehan 2023, Akash, 2023, ZX,WK, and MinLi, 2011,)

## **Conclusion**

Artificial Intelligence (AI) is a new technology in clothing construction for fashion and design students which will help to reduce the tedious traditional clothing construction process, reduce carbon dioxide emission making the technology sustainable, assisting students to input and output data from professionals as well as dictating counterfeit products by students. But this technology has not been included in the clothing and textile curriculum, the fashion industry itself has not integrated the technology into their industry. So there is need for collaboration between Yaba College of Technology and the fashion industry for the students' better understanding of the application of Artificial Intelligence.

## **Recommendations**

In view of the forgoing, the following recommendations were made:

1. Artificial Technology (AI) to be included in the clothing and textile curriculum for students of fashion and design in Yaba College of Technology.
2. Traditional Clothing Construction Process to be developed to integrate AI technology.
3. The fashion industry to fully integrate AI into the industry.
4. The fashion industry to adopt slow fashion instead of fast fashion in order to allow fashion students to predict the next trend.

5. There should be collaboration between the Yaba College of Technology and the fashion industry.
6. Traditional clothing construction methods and AI tools to be harnessed effectively for students to be at the forefront of trends.

### **References**

- Abu Sadat, M. S. Pomni, S., Al – Hussein, A & Tracy M (2022), International journal of fashion design, technology and education. Fashion 4.0 design ascyborga experimenting and designing with generative algorithm. Vol. 15 (2). Retrieved from: Just hit a button:? January 20<sup>th</sup> 2024
- Akash T, (2023), AI for fashion brands: use cases, benefits and future trends in the fashion landscape. Retrieved from: [www.leewayhertz.com](http://www.leewayhertz.com). January 21<sup>st</sup> 2024
- Alex, M. (2024), 10 best fashion designer tools, retrieved from: [www.urute.ai](http://www.urute.ai) January 21<sup>st</sup> 2024
- Bertagnoli (2022), AI and fashion: 7 cool applications. Artificial Intelligence’s versatility makes it the technological little black dress of the apparel industry. Retrieved from: builtin.com January 22<sup>nd</sup> 2024
- Chandadevi, G., Sheenam, J., Xianyi, Z. and Pascal, B (2019), A detailed review of Artificial Intelligence applied in the fashion and apparel industry. Retrieved from: IEEE Access digital object identifier. 101109/Access 2019. January 23<sup>rd</sup> 2024
- Frances, S. S. (2023), I was in a personal style rut, so I turned to AI for help. Retrieved from: [www.refinery29.com](http://www.refinery29.com) January 25<sup>th</sup> 2024
- Garim, L & Hyo-Young, K (2024), Human vs. AI: The battle for authenticity in fashion design and consumer response. Journal of retailing and consumer services, science direct, vol. 77. Retrieved from: [www.sciencedirect.com](http://www.sciencedirect.com) January 26<sup>th</sup> 2024
- Gino, G. (2021), Fashion future? Here’s why you should use AI for pattern making. Retrieved from: [www.istitumarrangoni.com](http://www.istitumarrangoni.com) January 27<sup>th</sup> 2024
- Hyosun, A & Minjung, P. (2023), An AI-based clothing design process applied to an industry-university fashion design class. Journal of the Korean society of clothing and textile 47 (4): 666-683. Retrieved from: Home>design>Fashion design. [www.reserachgate.net](http://www.reserachgate.net) January 28<sup>th</sup> 2024
- Jia Y, Wei, & Ying, H. (2022), Intelligent garment graphic design system for artificial intelligence and 3D image analysis, Mobile information systems. Hindawi Open Access, Vol. 2022. Retrieved from: <https://doi.org/www.hindawi.com> January 29<sup>th</sup> 2024

- Leo, R, Franklin, R. E. & Edmundo, C. (2023), Artificial Intelligence and Sustainability in the fashion industry: A review from 2010 to 2022. Open Access Vol. 5 (387). Retrieved from: [link.springer.com](https://link.springer.com) January 30<sup>th</sup> 2024
- Ilias, M, Lazaros, I & Elias, P. (202), towards fashion recommendation: An AI system for clothing data retrieval and analysis. Retrieved from: [Pubmedcentral.www.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/) January 31<sup>st</sup> 2024
- Jia, Y. & Ying, H. (2022), Intelligence garment graphic design system for artificial intelligence and 3D image analysis. Mobile Information systems, Hindawi. Retrieved from: [www.hindawi.com](https://www.hindawi.com). February 2<sup>nd</sup> 2024
- Obiana, U. V., Fadipe, E. O. & Ojiude, P. U. (2020), Clothing and Textile skills: A strategy for optimizing human capital development for sustainable family living amid socioeconomic challenges in Yobe state. International journal of development and eco sustainability, Vol.10 (2) 27-39. Retrieved from: <https://www.enjournals.org/@ERTDUK>: February 1<sup>st</sup> 2024
- Priscille, B. (2023), Artificial Intelligence (AI), You've got to be data-driven: the fashion forecasters using AI to predict the next trend. Retrieved from: [amp.theguardian.com](https://amp.theguardian.com) February 2<sup>nd</sup> 2024
- Tracy, A. M. (2019), 13 Skills needed to become a successful fashion designer. The hocking college experience. Retrieved from: [blog.hocking.edu.wedek@hocking.edu](https://blog.hocking.edu/wedek@hocking.edu) February 2<sup>nd</sup> 2024
- Scott, F. (2023), How Artificial Intelligence is changing the fashion industry Immago. Retrieved from: [immago.com](https://immago.com) February 3<sup>rd</sup> 2024
- Shemona, S. (2023), How AI is revolutionizing fashion design and manufacturing processes, just Style. Retrieved from: [www.just-style.com](https://www.just-style.com) February 3<sup>rd</sup> 2024
- Shuo, M. & Xiaogu, Y (2022), Application of BP Neural networks in garment pattern design system. Computational intelligence and neuroscience. PMB Pubmed central, National library of medicine. Retrieved from: [ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov/) February 4<sup>th</sup> 2024
- Woojin, C, Seyoon, J, Hayoun, K. & Yuri, L (2023), Developing an AI-based automated fashion design system: reflecting the work process of fashion designers. Fashion and textiles, vol. 10 (39). Retrieved from: [textiles.springeropen.com](https://textiles.springeropen.com) February 4<sup>th</sup> 2024
- ZX, G, WK, W. & Min, L. (2011), applications of artificial intelligence in the apparel industry: A review, restricted access journals. Retrieved from: [sagepub.com](https://sagepub.com) February 5<sup>th</sup> 2024