Mechanization of Camera by Bare-skined Image Detection

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Abstract--- India is famous for its culture, heritage, and some customs. In recent days, dresses have been made of sentiment. These are images that others share through pornographic videos and websites that play an important role in many and all of them, including improper dressing sensations for dangerous and life-threatening criminal acts. To avoid this, we create a mechanism for capturing an image based on improper dressing sense detection system. Whether it is good or bad, the camera captures the image based on the sense of clothing and the memory stored on the homepage, which can be otherwise disabled. A camera image sensor (CMOS operating pixel) that allows a reference image (tutorial image) to be compared to the center image after the comparison sensor, or to refuse to capture the image on a percentage basis. The uses of Artificial Intelligence technology and related methods for a long time, human origin detection system reasoning, reasoning, decision making more realistic simulation effects, of proper and improper clothes detection technique has very broad applications in image processing artificial reality. As an essential part of comparing good or bad clothes detection, the dressing process also has an important impact on the overall system performance and applicability. Animating and Detecting Our Clothes to Repeatly Reduce Programming Safety and Inappropriate Dressing. This technique accurately finds the positive or negative dress code based on the Random Support Vector Regression (RSVR). More importantly, compared to other existing clothing techniques, the proposed method is easy to implement and works, and in practice the network image can meet the needs of the general consumer.

Keywords--- Camera Detection, AI Clothes Image System, Proper and Improper Clothes Detection.

I. INTRODUCTION

Due to the rapid growth of technology, smart systems are impacted by our actions in our daily lives. For example, online shopping has grown very fast. More and more people are coming to online shopping, online auctions, etc. used to buy products of their own interest. Transaction has become the main trend this time around, offering customers greater convenience. But there is a client who has trouble buying clothes online and he / she cannot try the product before it. Impressions after dressing the decision of seeing customers to buy clothes. Therefore, there is an increasing need to create an AI restroom to simulate the visualization of dressings. That is why the most user-friendly body of researchers from previous works is the physical analysis and approach to building an AI (model). But we can use a simple approach to handle it. The user must walk in the image of Kinect, whose size is measured in real time, standing in front.

Try some clothes with body headache until it is consumed in retail shopping as a realistic method. It is tailored to the consumer who can meet some of his / her decisions on the size of the armor to make some of the previous dresses, colors and designs. Trend plays an important role. However, the current popular prediction algorithms are limited to difficult style levels, but impossible to any lighter item levels. It seems to us that they are predictions of the future of a particular type of fashion style, but the appearance of a particular dress they choose is unique. Therefore, the first solution proposed in this

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paper is directly predicted by the use of social media as a learning resource that is aimed at the trendy fashion trend. In particular, an in-depth time series framework for learning was established, and 380,000 street fashion images were collected from real-world data sets from fashion websites for evaluation of the framework. The test results show that state-of-the-art methods are superior, with a relative accuracy of 32.61% for the framework (CSE metric) and 27.56% for the prediction accuracy (MSE metric) and 7.02% for the forecast.

This make-up enhances sales performance at retailers to allow quick users to buy such results. Our system allows the user to select the number of cloths outfits to try, and they help the user see the body of the cloths outfit and the computer in real time on the user's body. Background description. You can change the selected good and bad clothing. The user can try on mirrors in this imaginary setting. It allows us to make the right use of clothing simulation on the user's body and depending on the size of the user's body, there will be a huge contribution by our company. Well fitted with good and bad clothes. To achieve the AI of image processing and augmented reality efforts used by the proposed programs.

Fig. 1.1: Proper and Non-proper Dressing

1.1 Indecent Dressing

Crude dressers attract sex, but often avoid genuine intimacy. They play the game simply by conveying their appreciation for seemingly economic purposes. Dishonest decorative, on the other hand, is fraudulently arrogant, exploitative. In contrast to others. A vulgar ornament does not cover the inferior emotion. They only try to create the illusion that the best and outstanding on campus by dressing in porn. One of the main innovations of women wearing porn is that

they have dissatisfactory views about themselves, which are specific beliefs that they would like to be treated like. Their study found support for this kind of concept. When they realistically embellish the experience and conflict of the failure of their bad relationships, women often do this to prevent their ability to perceive their problems as problems. A hope is found.

Female students have been exposed to unpleasant claims of sexual harassment by several instructors working at the Comprehensive and Higher Education Institute of the State University of Nigeria in the twenty-first century. According to the complaint, some men had sex from college students in exchange for better grades in lectures. Many students have complained that the media has been let down by their instructors during their daily work hours. Sexual harassment is described as essentially about power, and it depends on who has the most potential. In this regard, a female student can sexually harass a lecturer on the way she dresses. Indecent dressing involves some type of sexual harassment that exposes the breast, buttocks, and thighs. Physical attractiveness is another factor in sexual harassment.

1.2 Meaning of Indecent Dressing

According to Articlesbase.com (2011), each culture has its own dressing code that can be changed depending on the culture. Despite this change, one thing is for sure it is the accepted dress code for every culture. Those moral standards and the judgments of society affect the sets of the uncivilized. It is a time when civilization and personal discipline are done and those who are judged by others are dragged to the side. A dress is therefore said to be malicious when it comes to inspiring or influenced by almost all its users. According to any style of Line Source magazine (2011), it is also a show skin. Egwim (2010) suggests that a garment is, in particular, a crotch dressing, a man or woman, showing off one's body, part of the body, especially a chest, buttocks, or underwear for women in particular. As mentioned, covered. This is an overtly deliberate act of sensuously seeking and affecting the opposite sex, and stimulating the opposite sex to be kind, is more prevalent among singles (unmarried women and men).

This form of clothing is inappropriate and unacceptable (Source Online, 2011).

Fig. 1.2: Meaning of Indecent Dressing

These garments exhibited a high rate of stiff aggression and moral degradation in the society of our time.

1.3 Influence of Gender, Dress Pattern and Physical Attractiveness on Indecent Behavior

After the right person appears on the earth, we are experiencing irritability and unwanted sexual activity. Because harassment is often called for when shareholder consent is not sought and not obtained. With the advent of the modern era, sexual harassment is viewed in different forms and ways. Recently there has been a growing interest in sexual harassment, particularly given among undergraduates around the world. Some basic factors hold this responsibility. There is no consensus among researchers that sex and behavior constitute an important factor in the causal study of sexual harassment. Similarly, the Equal Employment Opportunity Committee is not welcome to define sexual harassment as a demand for sexual activity, a necessity for sexual activity, and any other oral or physical activity, or denial of this activity. It involves sexual harassment, when it affects individual work, or, indirectly, indirectly, in creating a personal performance or an intimidatingly hostile or offensive work environment. Generally speaking, sexual harassment etc. Most of the theories that can be done by a director, colleague, class, stranger, friend, client, family have been proposed to explain the concept. A sociological point of view is that men are programmed to be a part of their biological succession of sexual behavior in the biologically active workplace. Thinking about.

This scenario is therefore considered to be biologically normal sexual aggression. When I see patriarchy (paternal destiny) I believe that the patriarchal cultural system is the root cause of sexual harassment. On this social basis, men, like sex in nature, have computer-defined, female, social, political, and economic powers. Wandering perspectives shape the reality of society, claiming that correspondence is created. These communication activities to maintain strict conditions such as reproduction and sexual harassment.

By changing the laws and regulations of sexual harassment and demeaning practices that need to be maintained, and by changing the laws and regulations that characterize the assault, this is the point of view to improve the way we work to change these practices. However, some factors have recently been put on hold for sexual harassment offenders. These include sex, dress patterns, physical attraction and other sexes involved in sexual harassment. For example, I explained on a biological basis that sexual harassment is a natural result of a strong masculinity or a man's role as a sexual predator. Some researchers also find sexual harassment as a product of gender socialization work that encourages the oppression of women both in the workplace and in the public. For example, female participants reported a slightly more significant difference in sexual harassment, which was reported by gender harassment than male participants.

Separately, because men and women are the cause of sexual harassment, I have continued to see pornography as another important factor. She often found that women in pompous dresses thus felt special in the pathogenesis of sexual harassment. Similarly, it has been found that disgustingly dressed individuals engage in behavior that is only answered by those who are still beautiful in order to attract the opposite sex. We analyzed the common types of obscene dresses on the premises, namely, elite, shiny, indiscriminate, and offensive porn. Elite enchanting dressers are usually from a privileged and economical background.

II. LITERATURE SURVEY

Ethical response to prank decorating among Nigerian youths. Nudeness seems to be a malevolent dressing for our youth, as it is worth more than the humble. We cannot say that a discipline has fallen, and some of the young people can say that they are made to be part of the private to attract the opposite sex when they see what they wear in public. The cause of the study was found in the area, where these young people were clinging to the Internet as a result of abusive Internet, poor parents, and peer pressure abuse. Vulgarly decorate the shapes that are common among the young of southwestern Nigeria. These dresses appear in various forms of decoration of pornographic Internet use, which is why these young people, fading in value, and are very influential to colleagues.

Negative conclusions include rape, among others cases, prostitution, HIV / AIDS and other sexually transmitted diseases / infections, armed robbery, lying, and poor school grades. The main sources are the secondary sources and methods of observation: this paper has included three areas of data collection. It shows that vulgar dressing can have a negative impact on young people. It is recommended that parents / guidance should be taught to the educated children who are tough. To give them adequate attention, in particular, to promote what you have not done to promote social media, enjoyment home movies and even mass media, we need to promote ethical values and traditions in our society.

Officials of those institutions have been forced to restore dress, especially stems and high morals, integrity and civility among today's youth on obscene college campuses. There is another that is also a function of many reasons. Is this effort a success: enforcement and sanctions, a weak moral background from home and a lack of procedures and legal frameworks? Money lip service for dress code issues by authorities. The negative impact of foreign cultures on mass media moral pollution; In Nigeria, higher education institutions will have the problem of minor dressing among juniors. Crude dressing is one of the major problems that our young people, especially female students, consume. Paper Meanings and Pornography Dresses, Some Student Porn Dresses Causes Look at the kind of impacts of undergraduates in higher education institutions in Nigeria. The role of suggestions in regulating coarse dressing is also discussed. It specifically recommended that parents who want to adopt dress codes for their students should sit on their own responsibilities and higher education institutions.

2.1 Detection and Analysis System based on Image Processing

In terms of image processing, ore grain size detection has become one of the hot topics of ore grain detection. Online Detection of Ore Particle Size Ore fragmentation is very important, and the manual detection system takes many steps and time to consume. In terms of image processing, the ore size system is fast, accurate and adaptable. Mineral particle size and particle size distribution calculations perform on-line detection grinding process analysis and computer vision and image processing technologies. Finally, the error between the synthetic sieve and the granular analysis of the images is assumed to be taken by a concentration clothing store. Studies suggest that the data ore particle size image online detection and analysis system can accurately detect ore particle size distributions in real production and the feasibility and accuracy of the system have not been fully verified.

Finally, the model is posted on the user in real time. The problem is simply regulating the user to the correct position, size, rotation, pattern of the fabric. First, the problem of finding users and body parts is one of the key steps. In the literature, various approaches have been proposed to detect, bone tracking, pose evaluation and overlay the detecting cloths environment upper body part in the user interface. Program hacking Kinect applications are implemented in a programming environment in real-time. Kinect driver Middleware is used for various basic functions and process monitoring in conjunction with Microsoft Kinect.

III. MATERIALS AND METHODS

RSVR Random Support Vector Regression (RSVR) classification algorithms use the same basic idea, but it applies to predicting the true value of a class. RSVR recognizes the presence of linear characteristics of data and provides an efficient predictive model. They identify that clumsy dressing and worries can result in general risk factors. High scores of participants dressed in disgusting at the level of illegal harassment and individuals show a degree malevolent dressing. The results of this study reveal that dress patterns could have been an important factor in illegal harassment. The significance of this findinis we propose an artificial intelligence-appropriate dressing system, which greatly reduces programmatic security and inappropriate dressing. Most importantly, the proposed method is easy to implement and functional compared to other existing garment techniques, and can more effectively meet the requirements of network image matching for the general consumer.
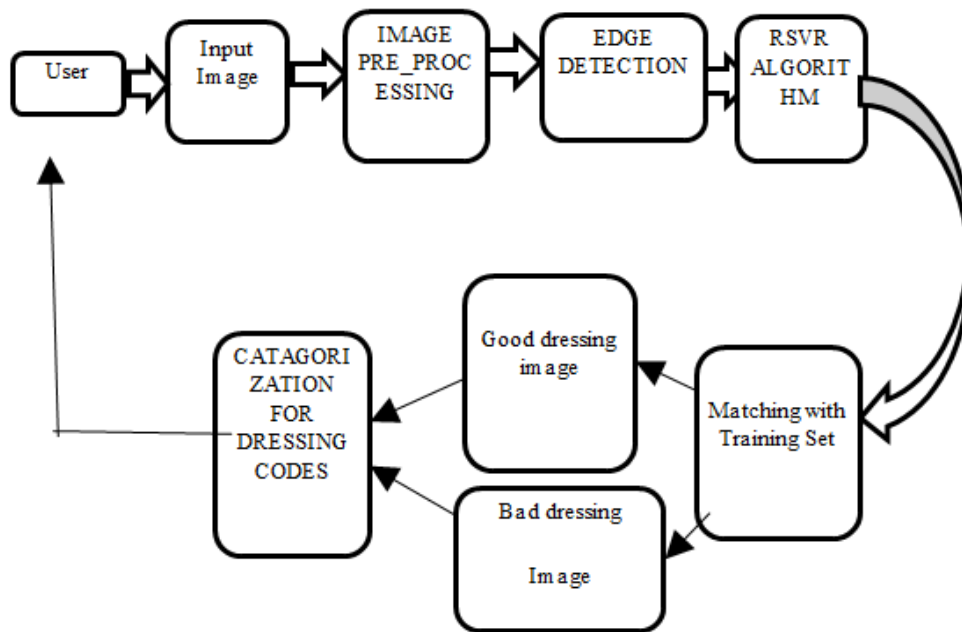
Figure 2: Categorization for Dress Matching

In this manner, the Image is based, and the proper detection increases. If the partial constant intensity will be too small for both Eq. If it has edges, then 1 is the smallest eigenvalue then (the image gradient is parallel, so that the eigenvalue is associated with the largest eigenvalue.

Pictured above: 2 represents the basis of the proper and non-proper dress wearing detection to convince, the frame processing client input image, the Image Fitting detection method is to find the Image in the frame, Analyzing to fix the edge points. The image is extracted and sent to the server. They are comprised of a server-side Image training set. When the Dress image training set applies, the client transmits the reception, Dress image information, and then, if they see fit, to their course. At the end of this model, that will state the state of the system, and print it out. The objective is to increase the Dress detection rate when the real-time requirements are met. It should be mounted on our way site the categorizing change is based on the straight detection framework. Test results achieve a better accuracy than our existing technology, and we can see that real-time performance is achieved.

3.1 Preprocessing of Dressing Image

Improved image preprocessing requires obtaining an image or some useful information from it. It parses the picture and manipulates it. Published results can be images or reports based on change image analysis. Preprocessing is a method that involves filtering smooth samples. This method prefers to use a filter to reduce noise. The filtering image is used to remove unwanted noise.

Algorithm

Input: Text image dataset

Output: preprocessed dataset

Step1: Input dressing image

Step 2. Read the image resizing.

Step 3. Process the smoothing data

Step 4: For (Each image calculate each intensity Image Ic utilizing heuristic saturation) Calculate dress

Object Color saturation histogram values

Apply PSnr noise ratio to minimization

Identify each object representation and saturated image

End of

Step 2: While (saturated dress image (Gsi)→effort)

Using FCM←Fast guided feature to smooth the image

Step 3: GE compute the gradient value mapping.

Step 4: smoothening the GE to normalize the image [0,255] of le

Step 5: Remove Noise

Dress features are resized to 256_256 pixels before the crop and feature extraction procedure. Pre-processing is primarily intended to reduce the effects of noise on lighting, color intensity, background, and orientation differences. Correct recognition of the image depends on the lighting conditions and the quality of the captured image. The recognition rate can be improved by pre-processing the captured image.

3.2 Edge Detection

This methodology for detecting borders in an image is presented. Several edge detectors can be applied to Dressing images, but there are cases in which edge detectors do not obtain a good performance because the image has soft transitions in edges .then apply, Laplace and Gradient edge detector filters, as a visual comparing these border detectors have not a good performance images.

It is based on detecting maximum changes in different directions of image. This edge detector image uses the 3over dimension of a matrix of 3by, there are many different types of matrix, and the main difference is that this matrix must rotate. Rotate the initial rotation matrix to the maximum found boundaries of the four different directions used in the image of a four person matrix.

Image fitting for clothing I(r; m;s)$= \frac{1}{r*s\sqrt{2\pi}}\exp{-\frac{\ln(r-s)^2}{2s^2}}$

Where r is a variable. m and s is the mean and standard deviation of the natural log of all single related component variables of the individual dress image.

Clothing categorized extraction, reduced function, and cloths classification. Dressing feature extraction is configured using image analysis of their biological relevance and calculated characteristics.

3.3 Harris Corner Detection

This technology, find a dress that corresponds to the frame, will be used for matching. If the client to capture video, in this is, then, Harris corner detection techniques, you will find a Dress in a given input image, modify the point to the edge of the detected cloth, and sends it to the server. This method presents a theory for detecting a fitting in the dress image.

Some of the edge detectors may be applied to the dress image, the image is a Laplacian and gradient edge detection filter, such that visually compare, soft transitions the border detector application .then edge since having the edge detector has a good performance not and may not give a good performance dress image.

Step 1: Initialize edge detection returned a Harris point corner.

Step 2: Points resembles detection in cloth image <- erase uncover Image (TC, edge image)

Step 3: Image processing ← (corner reduced image pixels)

Step 4: Image Gap variation points<-fill Gaps (dress over i*mage*)

Step 5: TC<-refine coordinates (edge image, gap image, TC)

Step 6: Intent train and transitions comparison values ←extract Image (Identity image, TC)

Step 7: cloth image←enhance contrast (match case image)

Step 8: Return (matched image)

Other edge detectors can be applied as well as the corner

algorithm. It is based on detecting maximum transitions in different directions in the image. This edge detector uses a convolution matrix of image 3over dimensions 3by, there are many variants of the convolution matrix, and the main difference is to rotate this matrix. Four convolution matrices are applied to the dress image, and the boundaries rotate the initial convolution matrix as seen according to the maximum of the four different directions.

3.4 Effects on Bad Dressing

The negative effects of crochet dressing are numerous. This list includes conservative sexual and sexually transmitted disease-dominated moral degradation, sexual assault, harassment, rape, and exposure. This leads to the constant promotion of nudity in society. This project will be considered animal in nature only if it satisfies its natural desires of society. It allows us to publish the most sublime codes, norms, and standards that simply lead to a society of inherent satisfaction.

3.5 Best Match Dressing Image

The extracted Dressing is already consistent with the image stored in the server. If the image is matched, the information about a particular proper appears on the client. If the database negative images comparing to other images, if its good replay will be positive or good, otherwise it is bad the result is negative or bad.

IV. RESULT AND DISCUSSION

The results and performance of the proposed implementation results will be tested in a mathematical lab image processing tool with trained features of the Dressing dataset. Performance evaluations are performed to test the proper dress code and specificity of non-proper dress code measures of the accuracy and reproducibility obtained during the execution phase. Test case measurements are calculated by the true and false position of the error rate performed during text processing.

Performance values are evaluated with accuracy and recall on a test-trained set of proper and non-proper values.

Table 1: Details of Parameters Processing

Parameters used	Values processed
Input dataset	Dress Image data set
Language used	Python
Number of images	Training and trained images process

4.1 Analysis of Precision

Table 2: Details of Precision Analysis

Methods	10 images	20images	30images
RSVR	67.3	69.3	68.2
PROPER	71.1	66.7	71.3
NON-PROPER	74.3	74.1	82.5

Table 1 details the natural image acquisition dataset that was processed to test the performance of the proposed system.
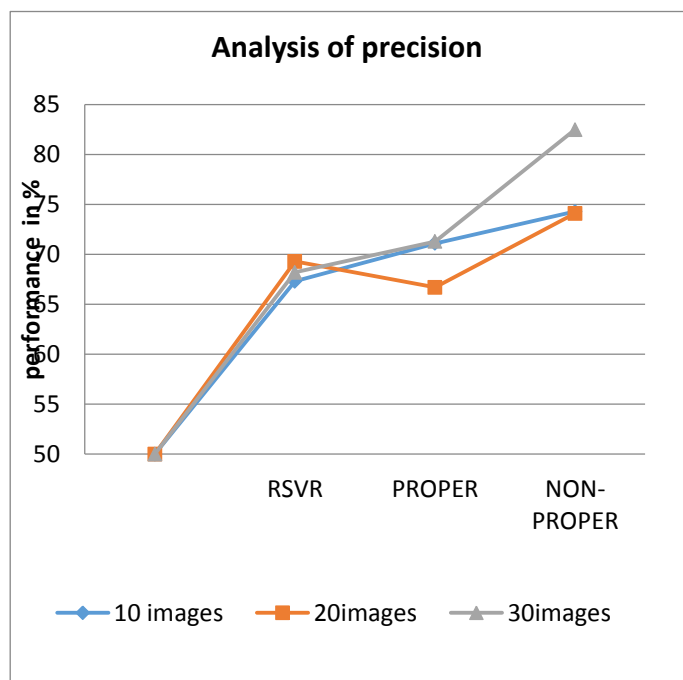

Figure 3: Analysis of a Precision Rate

Figure 3 above shows true positive accuracy rates observed from different methods and different data sets, the proposed implementation produces higher efficiency rates than other methods.
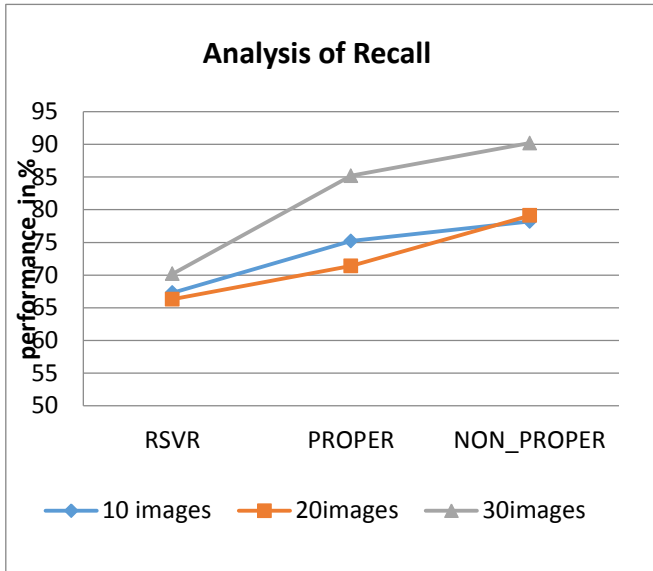
4.2 Analysis of Recall

Figure 4: Analysis of Recall

Methods	10 images	20image	30image
RSVR	67.3	66.3	70.2
PROPER	75.2	71.4	85.2
NON_PROPER	78.2	79.1	90.2

The recall analysis above Figure 4 was tested using different data sets. The collected data set has manufacturing differential test values in different ways. The proposed system has a higher recall than other methods.
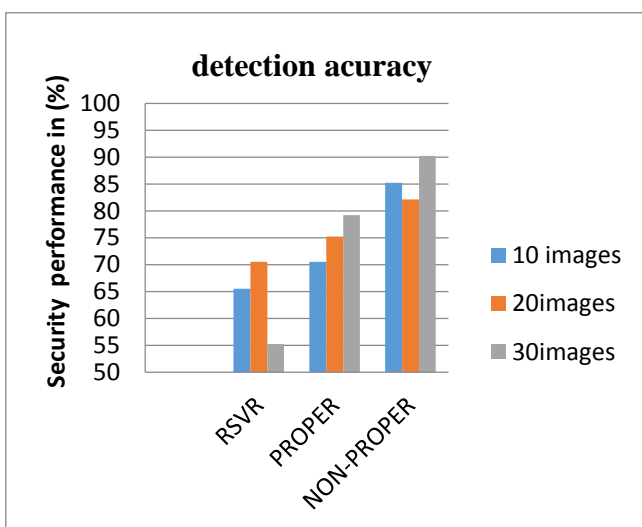

Figure 5: Comparison of Security Analysis

Images	image edge	extract	defect
10	25	15	12
20	32	23	13
30	38	28	19
40	45	33	24
50	49	38	28
60	54	43	32
70	59	49	36
80	63	51	39
90	67	55	41
100	69	57	43

Another method, shown in Figure 5 above, generates different levels of users to perform Dress proper and non-proper detection accuracy. The proposed system produces a higher impact on cloth detection performance than other different methods.

4.3 Time Complexity

It is positioned to evaluate time delay Performance. Dataset has applied to node the time analysis of these algorithms.
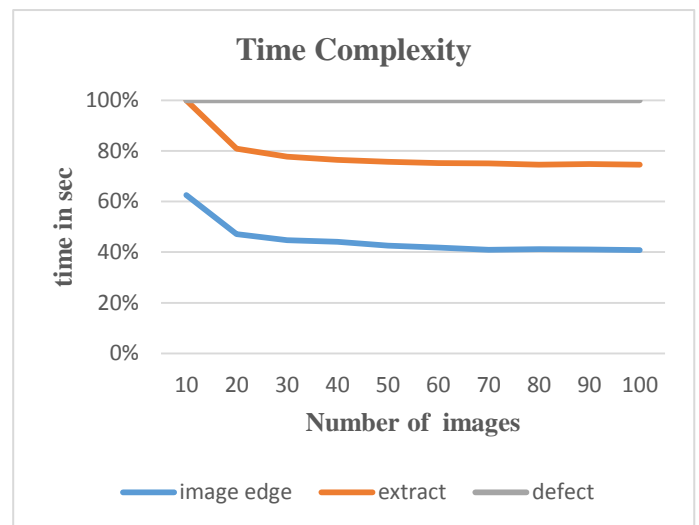

Figure 6: Performance of Time Complexity

The time performance is calculated based on the number of data images to be delivered to the destination within a period of time. AI image fitting, which consist of clicking or dragging activities on the pictures rather than typing textual characters, were introduced to overcome this problem.

V. CONCLUSION

From the results of the research Fashion is not just beautiful, but more about trends. To accurately predict the fashion trend of clothing, we must attend to both visual beauty and worldly coherence. Best as far as we know, this article is intended to be straightforward, as it is the first work to predict the condition of the fragmented appearance that breaks down with good and bad dressings. In addition, this work considers ideas of good or bad make-up trends, timing, and sensitivity issues, not only understands the visual bias but also predicts the timeline of fashion popularity. First, we extract both situational and visual features from the garments. Subsequently, we popularized the order learning method used by the RSVR system. Compared to other predictions, such as moral or unfair stock is a very complex issue of fashion's popular prediction. It involves a wide variety of social and cultural factors. In the future, we need to better understand the evolution of fashion and integrate other factors.

REFERENCES

[1] G.I. Otubah, "Ethical response to indecent dressing among Nigerian youths", Journal of Religion and Human Relations, Vol. 1, No. 6, Pp. 147-158, 2014.

[2] S. Olorunda, "Indecent Dressing among Youths in South-West, Nigeria", Pp. 1-18, 2018.

[3] K.O. Fayokun, S.A. Oyebade and S.O. Adedeji, "Moral Crisis in Higher Institutions and the Dress Code Phenomenon", Pp. 1-5, 2018.

[4] E. Uzobo, O.M. Olomu and D.A. Ayimoro, "Indecent dressing and awareness of health problems: A study of sagging dress pattern among selected male high school students in Bayelsa State", International Journal of Scientific Research in Education (IJSRE), Vol. 7, No. 1, Pp. 33-43, 2014.

[5] Indecent Dressing among Undergraduate Students in Nigeria. Counsels for Solving the Problem, Pp. 1-17, 2019.

[6] A.A. Ibrahim and A. Haruna, "The Psycho-Social Aspect of Indecent Dressing: Influence of Gender, Dress Pattern and Physical Attractiveness on Sexual Harassment", IOSR Journal of Humanities and Social Science, Vol. 19, No. 3, Pp. 14-19, 2014.

[7] A. Masri and M. Al-Jabi, "Virtual dressing room application", In 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT), Pp. 694-698, 2019.

[8] M.A. Liancheng, Y. Zhang, S.O.N.G. Guoqing, M.A. Zhen and L.U. Tianqi, "Ore Granularity Detection and Analysis System Based on Image Processing", In 2019 Chinese Control and Decision Conference (CCDC), Pp. 359-366, 2019.

[9] J. Che, J. Bai and Y. Zhang, "Space Imaging of Six-Wave Mixing in a Rydberg Dressing Atomic Ensemble", IEEE Photonics Journal, Vol. 11, No. 2, Pp. 1-9, 2019.

[10] L. Zhang, M. Kang and W. Tang, "Effect analysis of grinding wheel under different dressing parameters on surface grinding quality", In 2019 IEEE International Conference on Computation, Communication and Engineering (ICCCE), Pp. 113-116, 2019.

[11] P. Chen Kuo, "A study on segmentation and positioning paper dress design of market-oriented decision-making, Vanung University Dissertation", Taiwan, 2015.

[12] Y.C. Huang and C.C. Hsu, "Network virtual reality clothing silhouette design influencing factors", In 2019 IEEE 4th International Conference on Signal and Image Processing (ICSIP), Pp. 707-711, 2019.

[13] K.S. Choi, "Virtual Reality Wound Care Training for Clinical Nursing Education: An Initial User Study", In 2019 IEEE Conference on Virtual Reality and 3D User Interfaces (VR), Pp. 882-883, 2019.

[14] N. Jorge, L. Morgado and P. Gaspar, "Augmented learning environment for wound care simulation", In Proc. 2016 Annu. Conf. on European Distance and E-Learning Network, Pp. 256-264, 2016.

[15] S. Kubo, Y. Iwasawa, M. Suzuki and Y. Matsuo, "UVTON: UV Mapping to Consider the 3D Structure of a Human in Image-Based Virtual Try-On Network", In Proceedings of the IEEE International Conference on Computer Vision Workshops, Pp. 3105-3108, 2019.

[16] J.Y. Zhu, T. Park, P. Isola and A.A. Efros, "Unpaired image-to-image translation using cycle-consistent adversarial networks", In Proceedings of the IEEE international conference on computer vision, Pp. 2223-2232, 2017.

[17] B. Wang, H. Zheng, X. Liang, Y. Chen, L. Lin and M. Yang, "Toward characteristic-preserving image-based virtual try-on network", In Proceedings of the European Conference on Computer Vision (ECCV), Pp. 589-604, 2018.

[18] X. Mao, Q. Li, H. Xie, R.Y. Lau, Z. Wang and S. Paul Smolley, "Least squares generative adversarial networks", In Proceedings of the IEEE International Conference on Computer Vision, Pp. 2794-2802, 2017.

[19] P. Isola, J.Y. Zhu, T. Zhou and A.A. Efros, "Image-to-image translation with conditional adversarial networks", In Proceedings of the IEEE conference on computer vision and pattern recognition, Pp. 1125-1134, 2017.

[20] X. Han, Z. Wu, Z. Wu, R. Yu and L.S. Davis, "Viton: An image-based virtual try-on network", In Proceedings of the IEEE conference on computer vision and pattern recognition, Pp. 7543-7552, 2018.