Satispay for Online Shopping in Smart Android Phones

Chetan S P
Assistant Professor,
Dept. Of CS&E, CIT-
Ponnampet

Navile Nageshwara
Naveen
Assistant Professor,
Dept. Of CS&E, CIT-
Ponnampet

Nikitha Kaveriappa
Students, 8th Sem
CS&E, CIT-Ponnampet

Ms. Meghashree R
Students, 8th Sem
CS&E, CIT-Ponnampet

Abstract: **Augmented Reality is the field in which 3D virtual objects are integrated into a 3D real environment in real time. Augmented Reality is a variation of Virtual can also be implemented in military and law enforcement, medical field, automobiles, education, entertainment, impossible simulations, astronomy and in holographic mounted devices.**

Keywords: Smart Phone, Android, Online Shopping.

I.   INTRODUCTION

"Satis Pay" is an android application which utilizes the concept of augmented reality. It is an exclusive shopping application which makes to shop in a smarter, reliable & easier way. Here Augmented Reality is being tried out as a virtual trial for the user to select among several dresses while shopping online. Using the android phone's camera the user will see himself displayed on the screen. When the user selects any of the available clothing options, the application will augment that item onto the user's image and display it on the screen. The user can turn to view himself from all angles. In the current lifestyle time management is very important, this application helps the customer to shop by consuming less time. And it gives more innovative style to explore shopping.

During the last 30 years the access of personal computers has increased all over the world. Along with the development of new technology and computers, the ability to connect computers all over the world emerged in the 1970s. With better knowledge of how and why consumers shop online, marketers will be able to plan their marketing efforts in a better and more efficient manner.

Virtual try-on of clothes has received much attention recently due to its commercial potential. It can be used for online shopping or intelligent recommendation to narrow down the selections to a few designs and sizes. In this paper, we present an augmented reality system for 3D virtual clothes try-on that enables a user to see herself wearing virtual clothes while looking at a front camera display, without taking off her actual clothes. The user can select various virtual clothes for trying-on. The system physically simulates the selected virtual clothes on the user's body in real-time and the user can see virtual clothes fitting on the her mirror image from various angles as she moves. The major contribution of this paper is that we automatically customize an invisible (or partially visible) avatar based on the user's body size and the skin color and use it for proper clothes fitting, alignment and clothes simulation in our virtual try-on system. We present three scenarios: i) virtual clothes on the avatar, ii) virtual clothes on the user's image and iii) virtual clothes on the avatar blended with the user's faceimage

II.   E-COMMERCE STUDY ON ONLINE SHOPPING

The E-commerce is definitely the tendency of commercial development . Although it has been developing greatly, E-commerce is still on its initial stage. Comparing with traditional procurement methods, it still has many problems to deal with and to be improved. Both E-commerce and traditional commerce can be found in future commercial market. Therefore, E-commerce has great potentials of development. The one, which masters the solution of E-commercial fatal flaws, grasp its vitals and improve them, will take more shares of the market, whether now or in the future . Then what are the disadvantages of E-commerce? What could be improved? After comparison, we get the following result as shown in Table

	Traditional shopping	online Shopping	winner
Environme nt	Crowded, bad traffic, dirty air, physical exertion	Staying at home and can finish within a short time	Shopping online
Way to selecting	Inconvenie nt to choose and seek because of goods far apart	Quick searching by clicking the mouse	Shopping online
Goods distinguish	Knowing the goods through the sense and free from worry	Impossibl e to know goods directly only by pictures and texts	Tradition al shopping
Shopping carts	Moving trolley by hands	Virtual push and pop	Shopping online
Payment	Standing in line and wait	Just take some operation s	Shopping online

Logistics	Taking home by yourself	Express company do it for you but have to wait	draw

In the modern society, it is no doubt that shopping online is much more efficient compared with shopping in a particular mall. Customers are offered wider choice and save time, absolute advantages compared with traditional method, by shopping online. However, like advantages, weaknesses of online shopping do exist. For instance, customers cannot view products from different angles, or try on clothes virtually; they may worry about the fitness of the clothes. To reduce uncertainty, we design an engineering project, 3D modeling virtual fitting. Customers can try the clothes in any angle in real-time and choose the clothes they like; they will see themselves wearing the clothes they choose for the systems will synthesis the figure model with cloth models automatically. Taking this project can attract potential customers and reduce the logistics costs for return the unfit clothes.

1) ONLINE ANDROID CONTROL OF ACTIVE CAMERA FOR VISION TASK

Large networks of cameras have been increasingly employed to capture dynamic events for tasks such as surveillance and training. When using active cameras to capture events distributed throughout a large area, human control becomes impractical and unreliable. This has led to the development of automated approaches for on-line camera control.

We introduce a new automated camera control approach that consists of a stochastic performance metric and a constrained optimization method. The metric quantifies the uncertainty in the state of multiple points on each target. It uses state-space methods with stochastic models of the target dynamics and camera measurements. It can account for static and dynamic occlusions, accommodate requirements specific to the algorithm used to process the images, and incorporate other factors that can affect its results.

The optimization explores the space of camera configurations over time under constraints associated with the cameras, the predicted target trajectories, and the image processing algorithm. The approach can be applied to conventional surveillance tasks (e.g., tracking or face recognition), as well as tasks employing more complex computer vision methods (e.g., markerless motion capture or 3D reconstruction). Many computer vision applications, such as motion capture and 3D reconstruction of shape and appearance, are currently limited to relatively small environments that can be covered using fixed cameras with overlapping fields of view.

There is demand to extend these and other approaches to large environments, where events can happen in multiple dynamic locations, simultaneously. In practice, many such large environments are sporadic: events only take place in a few regions of interest (ROIs), separated by regions of space where nothing of interest happens. If the locations of the ROIs are static, acceptable results can be obtained by straightforward replication of static camera setups used for small environments. However, if the locations

of the ROIs are dynamic, coverage needs to be ensured throughout the entire volume. Using an increasing number of fixed cameras is impractical due to concerns over increased requirements in terms of computation and monetary cost, bandwidth and storage.

III   RELATED WORK

A demonstration version of Magical Mirror was shown at various expositions around Catalunya (Spain), in 2003, to check the reaction of the public, and received a positive feedback. We hand-designed graphical interfaces on Magical Mirror for interactive television, a multimedia player, weather data and news services. Since we could not yet control the actual applications by voice commands, we simulated control with a laptop (connected to the interface of the mirror) that responded to commands and signals from the users by playing multimedia content that closely matched the response expected of the actual applications. Most people attending the expositions, including kids and seniors, interacted with the mirror speaking in complete comfort. Magical Mirror at a public exposition The average time spent interacting with it was about 5 minutes per person; longer in the case of kids. The attribute that attracted the greatest deal of attention was not the function as information-services provider, but rather the capability of differentiating among interlocutors.

In other words, the high degree of personalization and humanity was the most appreciated feature identified by the public. Visitors could listen to their favorite songs and see images corresponding to their specific requests. The importance of the use of stereotypes was absolutely clear at the moment of the mirror's deployment. About 80% of the visitors requested the same artists and type of images; and these artists corresponded to the ones at the top of the charts of the season. Sport, and specifically soccer, was often the object of search requests.

A prototype of a device that incorporates interactive services of leisure and information, offered to the user through a natural interface in form of language and the visual superposition of images on the surface of a mirror, is being developed.

Fig 1: Magical Mirror at a public exposition

Special Issue - 2017

International Journal of Engineering Research & Technology (IJERT)
ISSN: 2278-0181
NCICCNDA - 2017 Conference Proceedings

OVERVIEW OF SATISPAY

By utilizing the technique of augmented reality our application helps to shop online more efficiently. It provides trial system in android phones to shop reliably. It recognize the human body in real time and gives the fitness through 3D virtual clothing. The following images gives the basic idea on how the application works.

Fig2: Selection of appropriate clothing.

The above figure indicates the related work on virtual reality. It is the work based on large display.

The above figure indicates the procedure of identifying the human body and imposing the virtual clothes on human body

Fig4: Selection process of Dress.

The above figure indicates the application view of selecting dress. The application gives the grid-view of dresses which consumers can try-on and check whether it suits them. They can also take a picture of trialed clothes for

IV CONCLUSION

With the rapid development of hardware and software use of augmented reality in engineering is becoming more and more adopted. In this paper, we present current trends in use of AR applications. AR applications, offers numerous opportunities for integrating and improving conventional methods used in all fields. The application is the best way for reliable online shopping of clothes in android phones. It gives the platform for augmented reality in android. Satis-pay is time saving and provides trialing of clothes in real time with a single click.

REFERENCES

[1] Aarts, E. H. L., Roovers, R.: IC Design Challenges for Ambient Intelligence. Proceedings of Design Automation & Test in Europe (DATE 2003), Munich, Germany (2003)

[2] Ceccaroni, L., Verdaguer, X.: TV finder: una aproximación semántica a la television interactiva. Proceedings of the workshop on Ubiquitous computation and ambient intelligence of the Conference of the Spanish Association for Artificial Intelligence (CAEPIA 2003), Donostia, Spain (2003)

[3] Dean, M., Schreiber, G., Bechhofer, S., van Harmelen, F., Hendler, J., Horrocks, I., McGuinness, D.L., Patel-Schneider, P.F., Stein, L.A.: OWL Web Ontology Language Reference. W3C Proposed Recommendation (15 December 2003)

Special Issue - 2017

International Journal of Engineering Research & Technology (IJERT)
ISSN: 2278-0181
NCICCNDA - 2017 Conference Proceedings

[4]   Ducatel, K., Bogdanowicz, M., Scapolo, F., Leijten, J., Burgelman, J-C.: Scenarios for Ambient Intelligence in 2010. ISTAG final report for the European commission (2001) Available at [http://www.cordis.lu/ist/istag-reports.htm]

[5]   (921kb), accessed 23 Apr 2004 [5] Gustafson, J., Lindberg, N., Lundeberg, M.: The August spoken dialogue system. Proceedings of Eurospeech'99, Budapest, Hungary (1999)

[6]   Ignatius, A.: We have contact. Time, June 4 (2001)

[7]   IST Advisory Group: Ambient Intelligence: from vision to reality. ISTAG draft consolidated report for the European commission (2003) Available at [http://www.cordis.lu/ist/istag-reports.htm] (225kb), accessed 23 Apr 2004

[8]   Lemon, O., Gruenstein, A., Battle, A., Peters, S.: Multi- tasking and Collaborative Activities in Dialogue Systems. Proceedings of 3rd SIGdial Workshop on Discourse and Dialogue, Philadelphia (2002) 113-124

[9]   Lindwer, M., Marculescu, D., Basten, T., Zimmermann, R., Marculescu, R., Jung, S., Cantatore E.: Ambient Intelligence Visions and Achievements: Linking Abstract Ideas to Real- World Concepts. Proceedings of Design Automation & Test in Europe (DATE 2003), Munich, Germany (2003)

[10] Marzano, S., Aarts, E.: The New Everyday: View on Ambient Intelligence. Uitgeverij 010 Publishers. ISBN: 9064505020 (2003).