

# Smart Virtual trial room using augmented reality

Prof. Bhadkumbhe S.M.<sup>1</sup>, Pardeshi Deepa<sup>2</sup>, Koli Aarti<sup>3</sup>, Bhalerao Pranav<sup>4</sup>, Vasatkar Chaitanya<sup>5</sup>

<sup>1</sup> Professor, Computer Engineering, P.D.E.A.'s COE Manjari (Bk), Maharashtra, India

<sup>2</sup> Student, Computer Engineering, P.D.E.A.'s COE Manjari (Bk), Maharashtra, India

<sup>3</sup> Student, Computer Engineering, P.D.E.A.'s COE Manjari (Bk), Maharashtra, India

<sup>4</sup> Student, Computer Engineering, P.D.E.A.'s COE Manjari (Bk), Maharashtra, India

<sup>5</sup> Student, Computer Engineering, P.D.E.A.'s COE Manjari (Bk), Maharashtra, India

## ABSTRACT

*Abstract— The Internet has become an essential part of our daily life, and companies realize that the Internet can be a shopping channel to reach existing and potential consumers. An online shopping system that permits a customer to submit online orders for items and/or services from a store that serves both walk-in customers and online customers. The online shopping system presents an online display of an order cutoff time and an associated delivery window for items selected by the customer. With this consensus Online Shopping as a whole has rapidly grown. The biggest surprise is that clothing is one of the top categories purchased online.*

*In this project with the better interactive features in clothing websites will boom sales over the internet? Here, the customer will be provided with an additional facility of determining the actual view by making him upload his photos in various angles and then matching the photos with cloths available, sorted as per his choices. Customer can also choose different range of wrist watches, glasses and caps and see that it match them perfectly on their uploaded photo or not.*

*In this project, the main aim is to demonstrate that with better interaction features in clothing web sites could improve sales over the net. With the help of the our project the customer will be able to view his choices on screen according to him and thereby can make better decisions..*

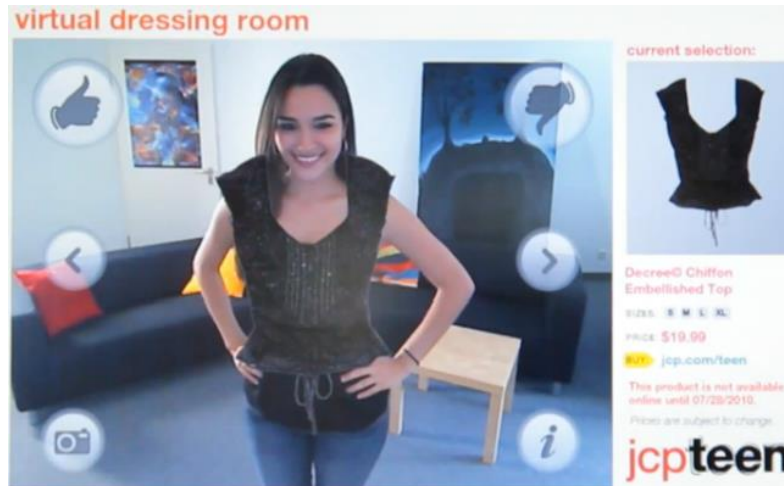
**Keyword:** - *IntelligShop; location-based augmented reality. Etc....*

## 1. INTRODUCTION

Shopping is an important part of our daily life and today's vibrant economy. According to the Year 2013 Singapore government report<sup>2</sup>, among receipts totaling S\$23.5 billion are for shopping. With the proliferation of smartphones and ubiquitous supporting of 3G/4G/LTE networks, we have the opportunity to enhance the shopping experience through mobile technology. In reference paper, demonstrate IntelligShop, a novel location-based augmented reality application, for intelligent shopping in malls.

In Virtual dressing rooms for the fashion industry and digital entertainment applications aim at creating an image or a video of a user in which he or she wears different garments than in the real world. Such images can be displayed, for example, in a magic mirror shopping application or in games and movies. Current solutions involve the error-prone task of body pose tracking.

We suggest an approach that allows users who are captured by a set of cameras to be virtually dressed with previously recorded garments in 3D. By using image-based algorithms, we can bypass critical components of other systems, especially tracking based on skeleton models. We rather transfer the appearance of a garment from one user to another by image processing and image-based rendering. Using images of real garments allows for photo-realistic rendering quality with high performance.



## 2. PREVIOUS SYSTEM:

In this paper, we demonstrate IntelligShop, a novel location-based augmented reality application, for intelligent shopping in malls. The key functionality of IntelligShop, as shown in Figure 1, is to provide an augmented reality interface people can simply use ubiquitous smartphones to face the retailers, then IntelligShop will automatically recognize the retailers and bring their online reviews from various sources (including blogs, forums and publicly accessible social media) to display on the phones. It is worth noting that, IntelligShop provides seamless location based augmented reality, which makes the review obtaining process much easier – the user now does not need to type the retailer name or browse through some retailer catalog; instead she just simply raises the phone camera against the retailer for immediately getting its reviews displayed at the right location.



Fig.1 Application of IntelligShop

### 2.1NOVELTY OF INTELLIGSHOP

To the best of our knowledge, IntelligShop is the first indoor location-based augmented reality application that integrates heterogeneous-device wireless localization and automatic online content crawling for intelligent shopping. IntelligShop is different from other notable location-based augmented reality applications in the market.

## 3. PROPOSED SYSTEM

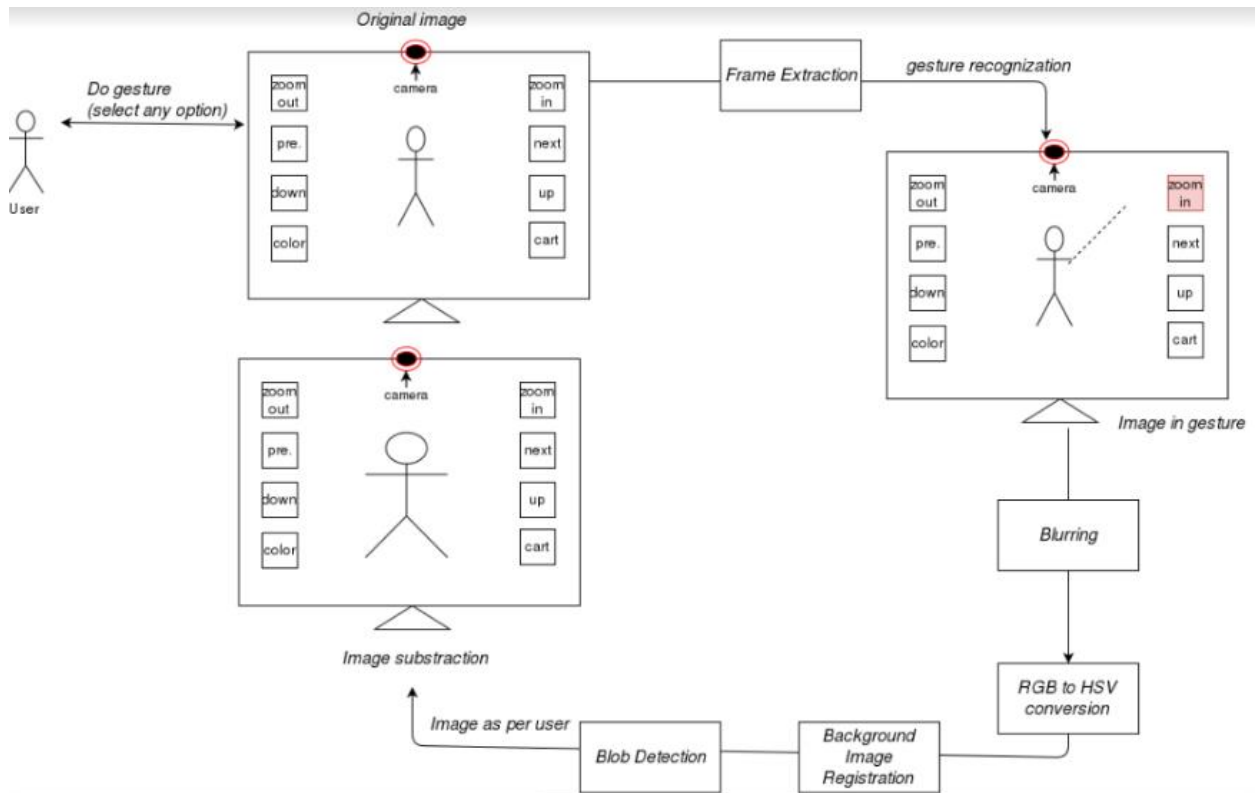
### 3.1. Introduction

Virtual dressing rooms for the fashion industry and digital entertainment applications aim at creating an image or a video of a user in which he or she wears different garments than in the real world. Such images can be

displayed, for example, in a magic mirror shopping application or in games and movies. Current solutions involve the error-prone task of body pose tracking.

We suggest an approach that allows users who are captured by a set of cameras to be virtually dressed with previously recorded garments in 3D. By using image-based algorithms, we can bypass critical components of other systems, especially tracking based on skeleton models. We rather transfer the appearance of a garment from one user to another by image processing and image-based rendering. Using images of real garments allows for photo-realistic rendering quality with high performance.

### 3.2 Architecture



### 3.3 Aims and Objectives

In this project, the main aim is to demonstrate that with better interaction features in clothing web sites could improve sales over the net. With the help of the project the customer will be able to view his choices on screen according to him and thereby can make better decisions.

#### OBJECTIVES

- 1) Try different products (clothes, jewellery, speaks) Virtually using Augmented Reality.
- 2) To learn about recent technologies which are used in the retail industry.
- 3) To find out the virtual reality technology in online shopping.
- 4) To know the impact of smart virtual trial room on customer.

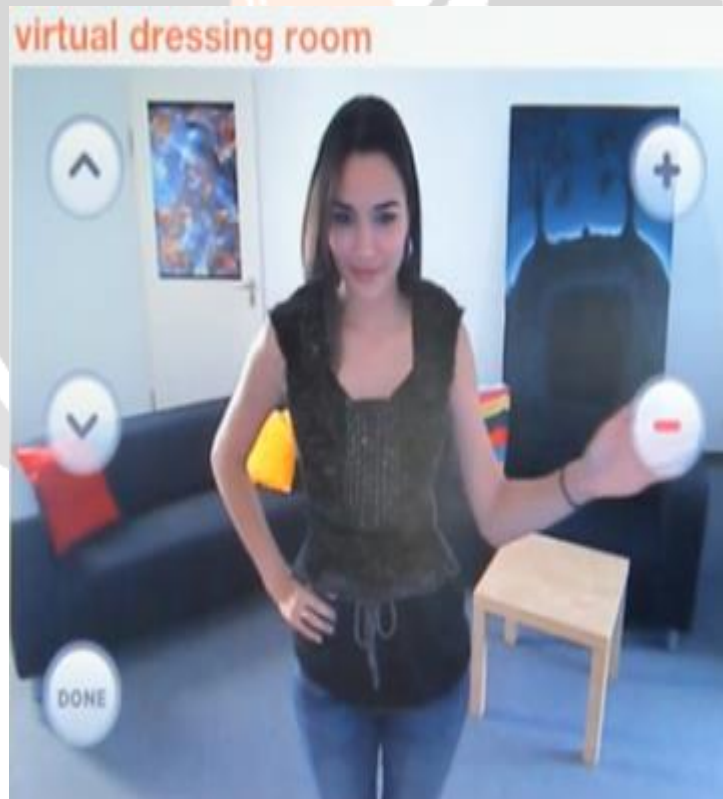
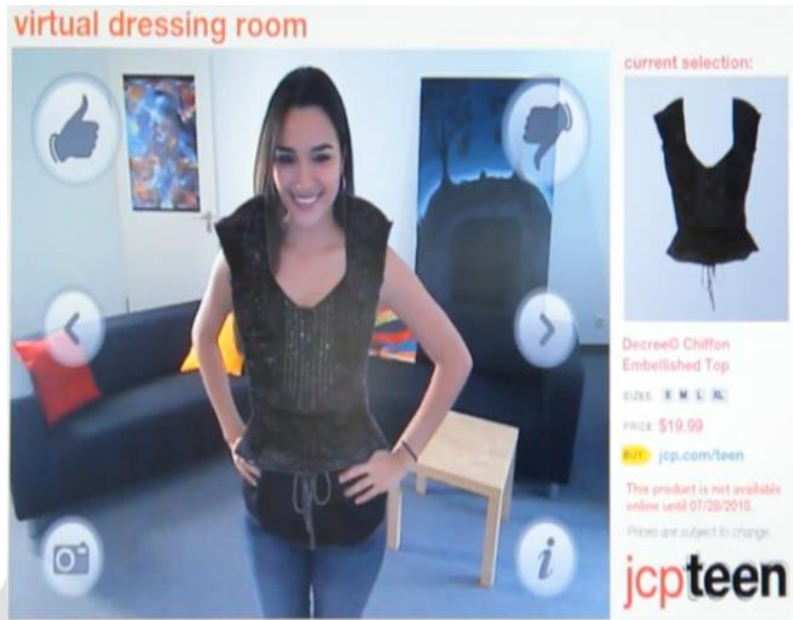




Fig.Proposed System

#### 4. CONCLUSIONS

- 1) A mixed reality based virtual clothes try on system described
- 2) Series of novel techniques for virtual try on was proposed
- 3) The major contributions automatically customized an invisible avatar based on users body size.A user study was also conducted to evaluate effectiveness .The result showed that it can help in customers purchased decision .
- 4) It can be concluded that AR is far behind than VR in reality in maturity.
- 5) May be it take too much time to applied in regular life because if the cost
- 6) Accuracy is required in success of ARthat is quite difficult
- 7) But still AR has a great future as it promises better interaction with real and VR world which is previously unimaginable
- 8) To add information and meaning to a real object or place .Unlike VR,AR does not create a simulation of reality ,but its augments the reality or mix the virtual with real .
- 9) AR will further blur the line between what's real and what's the computer generated by enhancing what we see .What we hear ,feel and smell
- 10) The goal is to make the system that will be so efficient that the user will not be able to tell the difference between real world and VR world
- 11) It has possibilities beyond our imagination and perception .It will have huge applications in almost every field.

#### 5. REFERENCES

- 1) K.Srinivasan, K.Porkumaran, G.Sai Narayanan, "Enhanced Background Subtraction Techniques for Monocular Video Applications",International Journal of Image Processing and Applications,Vol. 1,no. 2,pp.87-93,2010.
- 2) Department of Electronics & Informatics1 Athlone Institute of Technology Athlone, Co. Westmeath, Ireland
- 3) Health Service Executive2 Primary Care Centre, Flancare Business Park Ballyminion, Longford, Co. Longford, Ireland
- 4) Cabrera Maria E1, Novak Keisha2, Foti Daniel2, Voyles Richard3 and Wachs Juan P1 1 School of Industrial Engineering, Purdue University, West Lafayette, IN. USA 2 Department of Psychological Sciences, Purdue University, West Lafayette, IN. USA 3 Engineering Technology, Purdue University,

- 5) Srinivasan K. Department of Electronics and Instrumentation Engineering Sri Ramakrishna Engineering College Coimbatore, India [hod-eie@srec.ac.in](mailto:hod-eie@srec.ac.in)
- 6) Srinivasan K. Department of Electronics and Instrumentation Engineering Sri Ramakrishna Engineering College Coimbatore, India [hod-eie@srec.ac.in](mailto:hod-eie@srec.ac.in)

