

Good Morning . Myself Shriyash Karekar along with Aqueel and Imran . We are having project presentation on Realtime Size Estimation

In this modern times do prefer online shopping... as it save our time rather than visiting stores.... but when it comes to buying clothes we do prefer going instores.. Commonly due to size issues that we face.

Even most of the brands usually have different standards of clothing sizes With the help of this project, we can overcome these problems using just our mobile devices.

In the year 2015 , research centre for information technology published a paper called Seeing through the appreances in which they estimated body measurements from extracting features from the silhouette using Multi view body shape modeling while their technique was quite complex and had satisfactory results

In the year 2019, Elsevier B.V published a paper called Fitme in which it estimates body measurements using Haar cascade classifier and SVM . Model doesn't perform good if we also consider side images of body apart from front images

In the research paper Seeing through Appreances they proposed a model using Multi viewing image modelling in which once the 2D image is fed it reconstructs the body shape separating it from the background and extracting silhouette or the outline.

Then from this..... different parts of body are recognised.

For estimating the sizes they consider five different measurements such as two vertical measurements (i.e., overall height and inside leg length) and three horizontal measurements (chest width, waist width, and hip width) .

Which are then fitted into linear regression method. The model had huge variations in some case from true value and predicted value .

In the research paper Fitme They proposed a model which takes 2D images by capturing photos on smartphones .

For implementation they used computer vision more specifically **HAAR CASCADE CLASSIFIER** to detect the human body...

So in this detectors were designed such that one will identify the upper body, another will identify lower body and the last one will identify the full body...then after detecting they extracted the features by segmenting each image into 40 parts to estimate shoulder width , waist circumference and all...

It is then fed into SVM model for predicting size of clothes based on estimated measurements.

This model had a one limitation... Accuracy would fall drastically when the side images were considered.