

**REAL-TIME MOUSE FOR HUMAN-COMPUTER INTERACTION BY  
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**ABSTRACT:**

Here the interaction of the human computer plays a major role in its condition oriented analysis related to the well known environment of the stipulated field by which there is a system is design oriented with respect to the well known strategy of the user friendly environment respectively. Here a new technique is designed with a well efficient framework oriented aspect by which there is an implementation of the scenario related to the real time environment in which interaction of the human computer based analysis by which there is an data glove oriented hand followed by the classifier of the KINN based phenomena in a well efficient manner for the efficient recognition of the recognition of the gestures in a well effective manner by which there is an proposed system respectively. Here apart from the usage oriented phenomena in which there is a well accurate implementation with respect to the accurate analysis of the popularity related to the aspect of the technique based on the HCI plays a crucial role respectively. Here the environment related to the digital scenario by which there is a well effective interaction frequently considering the hand as the body part related to the scenario of the recognition of the gesture in a well oriented fashion respectively. Here in the research oriented scenario by which there is a complexity in the system related to the motion flexibility oriented hand is a major concern respectively. For the successful and the accurate analysis oriented fashion there is a technique based on the recognition of the gesture oriented with respect to the classifier of the KNN strategy plays a major role in its implementation analysis in which glove oriented hand is used in the well effective manner respectively. Simulations have been conducted on the present method and a lot of

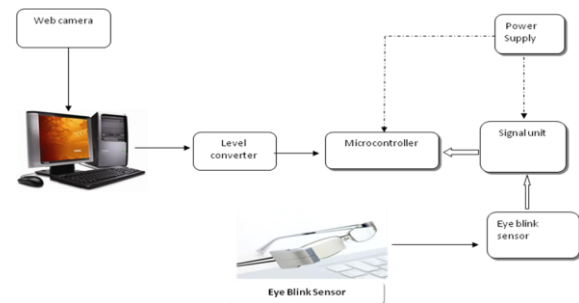
analysis takes place on the huge number of the data sets with respect to the random environments where there is an improvement in the performance followed by the outcome in a well oriented fashion of the entire system based aspect respectively.

**Keywords:** *ARM, sensors, camera, PC, mat lab respectively.*

## 1. INTRODUCTION

There is a lot of advancement takes place in the society with respect to the recognition of the gesture in which recognition of the hand in the entire body with respect to the glove plays a major role respectively [2]. There is a rapid advancement in the technology oriented with the computer based analysis and maintenance of the effective communication between the user followed by the computer in a well efficient manner respectively [1][3]. Here the system with the ubiquitous phenomena in which there is a controlling of the above strategy plays a key role respectively [4][5]. Here there is a lot of variation takes place by which there is a modification of the scenario in which there is recognition of the gesture in terms of the recognition of the user is a main scenario respectively.

## BLOCK DIAGRAM



**Fig 1: Shows the block diagram of the present method respectively**

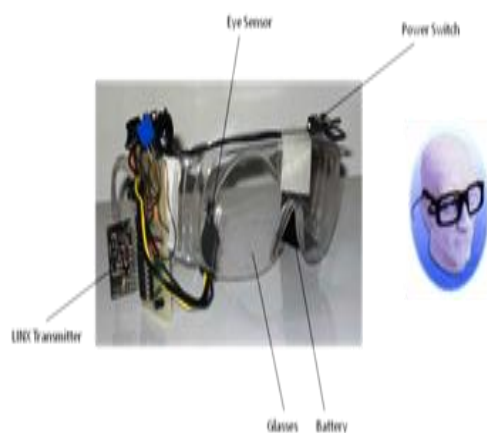
## 2. METHODOLOGY

In this paper a method is designed based on the well effective frame work oriented strategy in a well efficient manner respectively [8][9]. Here the implementation of the present technique followed by the analysis oriented aspect related to the architecture based strategy is shown in the below figure in terms of the block diagram based approach respectively [6][7]. Here the present method completely overcomes the drawbacks of the several previous methods in a well efficient manner respectively [10]. Here the present implemented technique is designed in such

a way in which there should be an accurate analysis is made on the lot of the previous methods oriented failures followed by the accurate analysis based aspect in a well efficient manner and improve the performance of the system followed by the improvement in the accurate outcome oriented strategy in a well effective manner respectively. Therefore the present designed method is effective and efficient in terms of the performance based strategy followed by the outcome oriented pattern respectively.



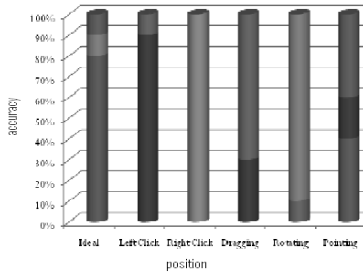
**Fig 2: Kit Demonstration**



**Fig 3: Eye Blink Sensor**

### 3. EXPECTED RESULTS

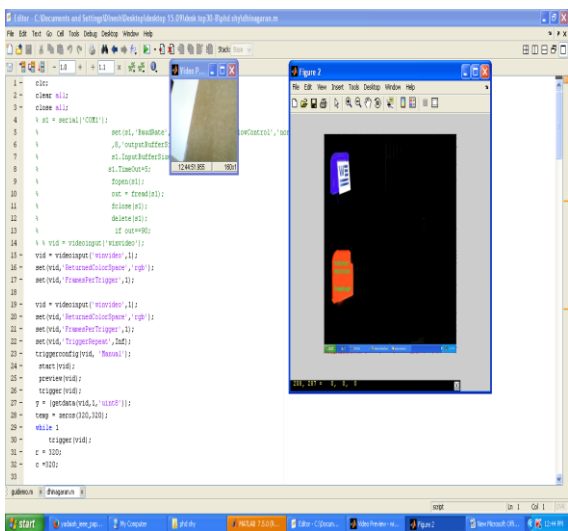
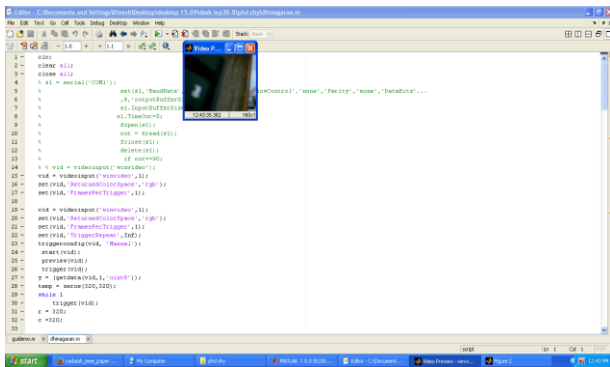
A lot of analysis has been made between the present methods to that of the several previous methods in a well efficient manner respectively. A comparative analysis is made between the present method to that of the several previous methods and is shown in the below figure in the form of the graphical representation respectively. There is a huge challenge for the present method where it is supposed to implement the technique in a well efficient manner where it is supposed to improve the performance of the present system respectively. There are a number of experiments have been conducted on the large number of the data sets in a well effective manner respectively. There is a huge challenge for the present method where it is supposed to control the degraded performance of the previous methods in a well efficient manner followed by the accurate outcome of the system based aspect towards the accuracy related analysis of the entire system respectively.



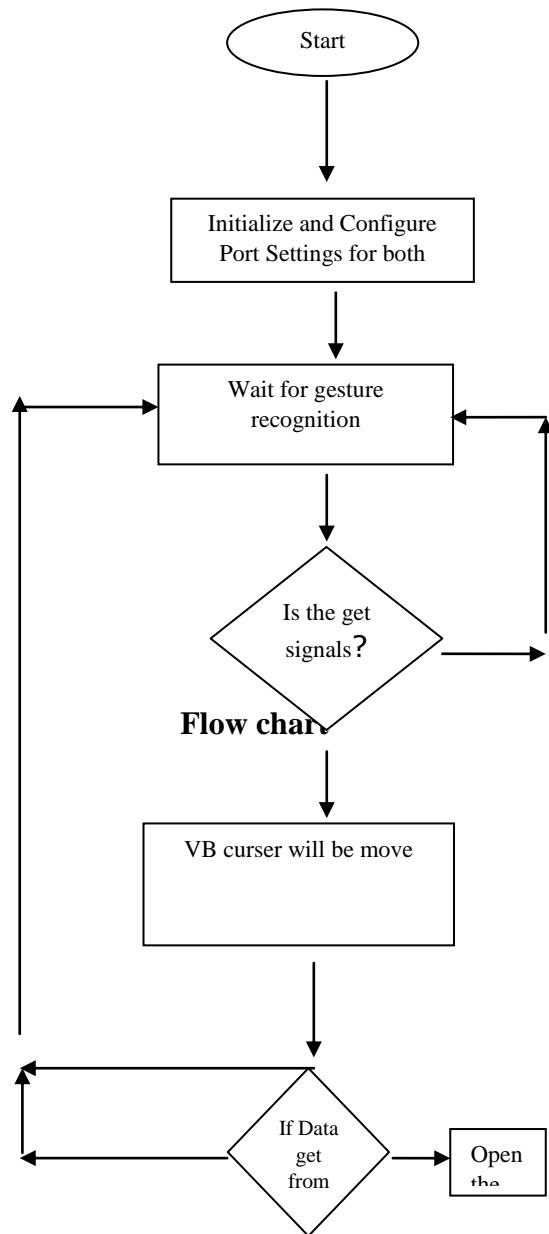
**Fig 4: Shows the graphical representation of the present method respectively**

**Out Put Screen Shots:**

**Capture gesture & icon window**



**Flow chart:**



**4. CONCLUSION**

In this paper, a real-time Human-Computer Interaction based on the hand data glove gesture recognition is proposed to recognize hand gesture accurately and successfully data glove is used. By moving

the hand, the cursor can move accordingly. The results show that glove used for interaction is better than normal static keyboard and mouse as the interaction process is more accurate and natural. Also it enhances the user's interaction and immersion feeling. A web cam is used to capture the hand movement.

In addition to movement of pointer, selection is possible by using an eye blink sensor. This will make the user to interact with the Pc or machines in high speed. Each blink of the eye is detected by an infrared sensor, which is mounted on dummy spectacle frames. The eye blink switch can be set up to operate on either eye and maybe worn over normal glasses. The sensor is connected to a hand-held control the opening the folders.

To show to our visible eyes we are using the visual basic software to write the program and demonstrate.

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