****Cairo University

Faculty of Engineering

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| Glove Mouse |
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Glove Mouse

Dr. Islam .A.El Sattar Eshra

**Abstract:**

Computers are daily used devices, and input methods are going wireless, simpler, and multi- functioning in the same time. That's why we came up with "Glove Mouse". After making further researches on this idea, we found out that it's pretty much doable, based on a modern component and widely used named "accelerometer".

3-Axis Accelerometer as which is used in mobile phones nowadays to rotate the screen, play games, and run accelerometer based software, by detecting tilting and vibrations in 3D space(X, Y and Z directions), or this is how most of people think it works...

But in fact it measures the acceleration in these directions, and by a simple process using a microcontroller as an example, wireless module along with some programming, we will create this device that will be used to interact with and manipulate items on screen via a simple movement and clicking on the air as our device will be shaped as a

Glove!

**CONCLUSION:**

In our project we did applications on accelerometer to show the importance of them but in order to enhance these applications we use wireless module to make the tracking of orientation is done wireless.

We made a complete system that digitalize the analog produced Signals from motion sensing device (accelerometer) then this Digital data is sent wireless to reach the desired point to follow an Algorithm that differs from application to another according to the requirements of the application.

**Glove mouse**

We used the transmitter circuit to send the accelerometers output to the pc to control the mouse .

**Wheel chair**

We used the transmitter circuit to convert the accelerometer output to a decision Which we send it to wheel chair receiver to tell it where to go .