

The glove can now efficiently identify the hands movement with 100% accuracy.

However, data gathered from the z-axis has been deemed unimportant in identification. The hand inside the program now exists in two dimensions X and Y (Up,Left,Right,Down). This new and improved accuracy was achieved by changing the method in which both variance and the mean are calculated. Previously, the variance and was calculated for the whole dataset gathered which proved to be an unreliable method for determining movement. The solution is so brilliantly simple; The variance and mean calculation should be done only during peaks of activity. This is done by using the mindex and maxdex values used for recognition to narrow the window at which these calculations are done. This proved to be a more robust method for activity detection and gesture recognition.