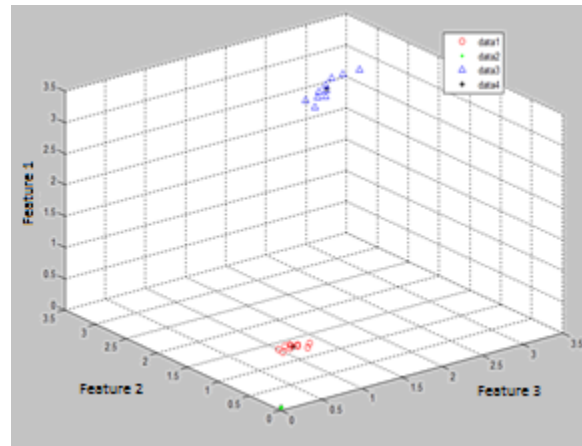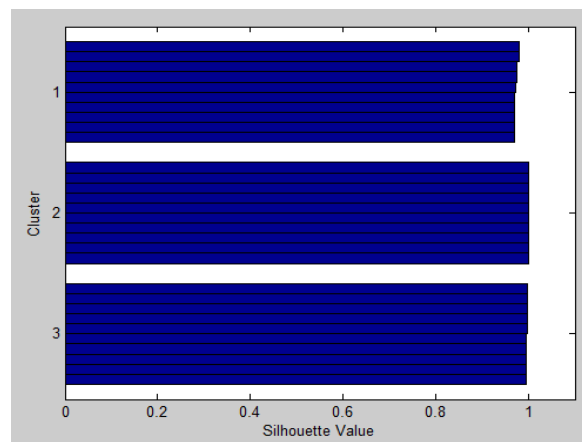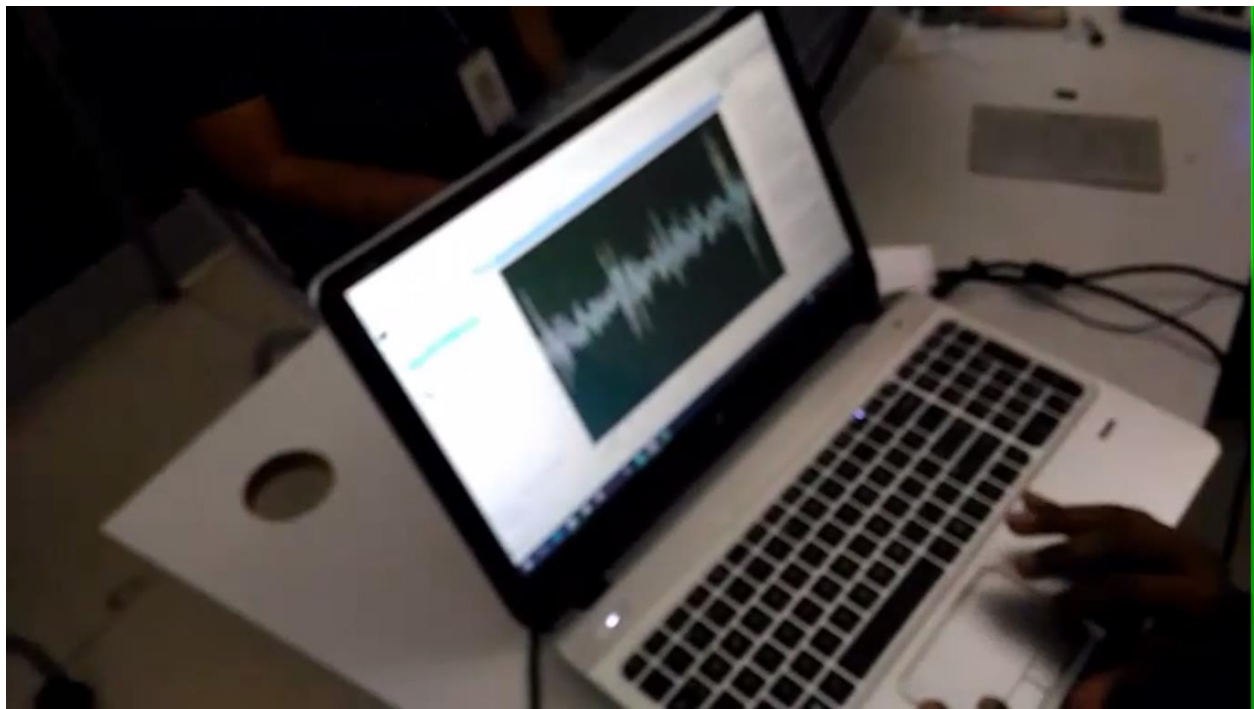In the given below plots one can see a clear distinction between the 2 colors red and blue. Further we will be working on differentiating all the three colors (Red, Blue and Green).Figure 1. Is the cluster map produced through processing and feature extraction, differentiating the red and blue colors. Figure 2. Is a Silhouette plot of a distance between the clusters which also shows to what extent the colors are differentiable.

Fig1. Plot showing clusters of three colours (red, blue)

Fig2. Silhouette plot showing the distance between clusters of three colours.

Figure 3. Signal acquisition through NI6363 using LabView Signal Xpress