Project Report-CROVHD

Mounica.M

200901089

He work was mainly focused on implementation of CROVHD system. In the semester, I mainly concentrated on developing an interface for the system. The toolkit is implemented in qt4.7. I am drawing the plots in opengl.

The main features of the tool kit are

1. Drawing density plots.
2. Drawing scatter plots.
3. Drawing these plots for three data scales: one without any change , min-max normalization and z-score
4. Drawing scatter plots for particular dimension given bit string as an input.
5. Zooming of the plot.
6. Recursively plotting areas i.e if an area of plot is clicked, similar plots for the bin corresponding to that area are plotted.
7. Showing the datapoint values in the plots. Here I have a doubt regarding when to show the values of the points. Should I show the point values when the area is zoomed or when scatter plots for a particular dimension are drawn (see fig). What if the points are too many?

I have implemented the first four features in qt. I have included the snapshots of the interface at this stage. (The scale is not written in plots.). Iris dataset is plotted in these plots.
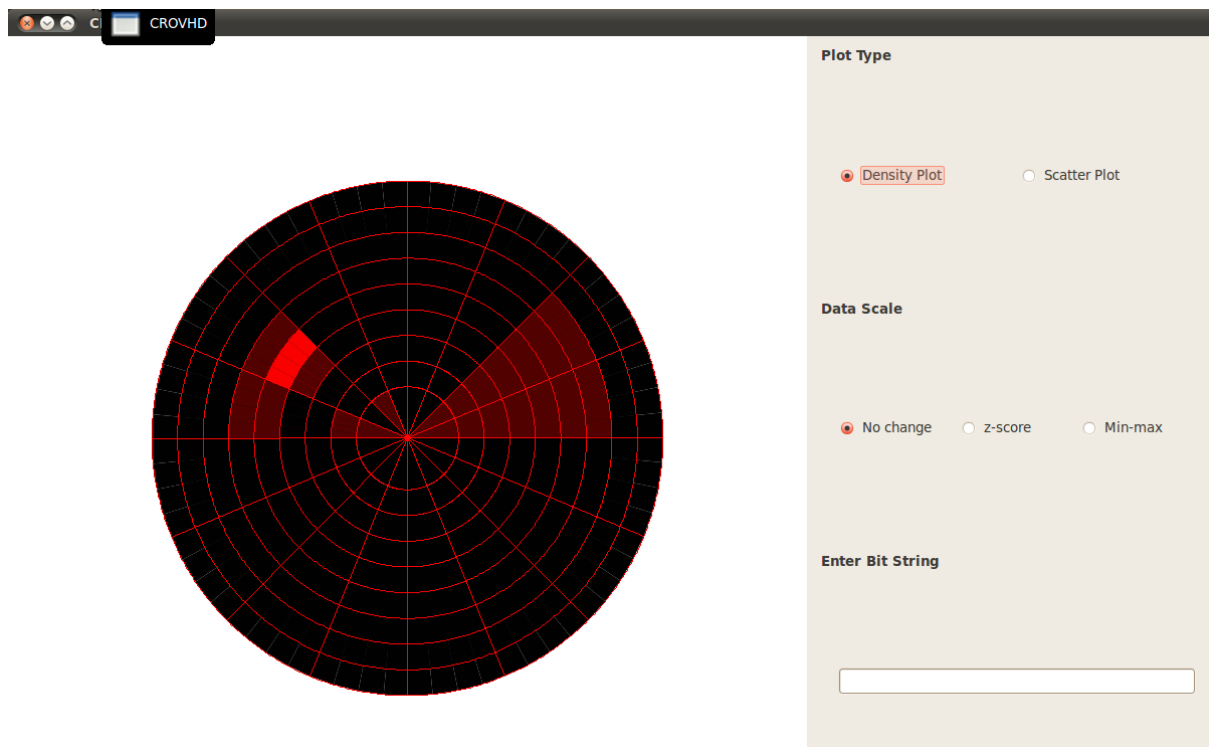

Fig 1: Density plot (The intensity of red color gives the density)
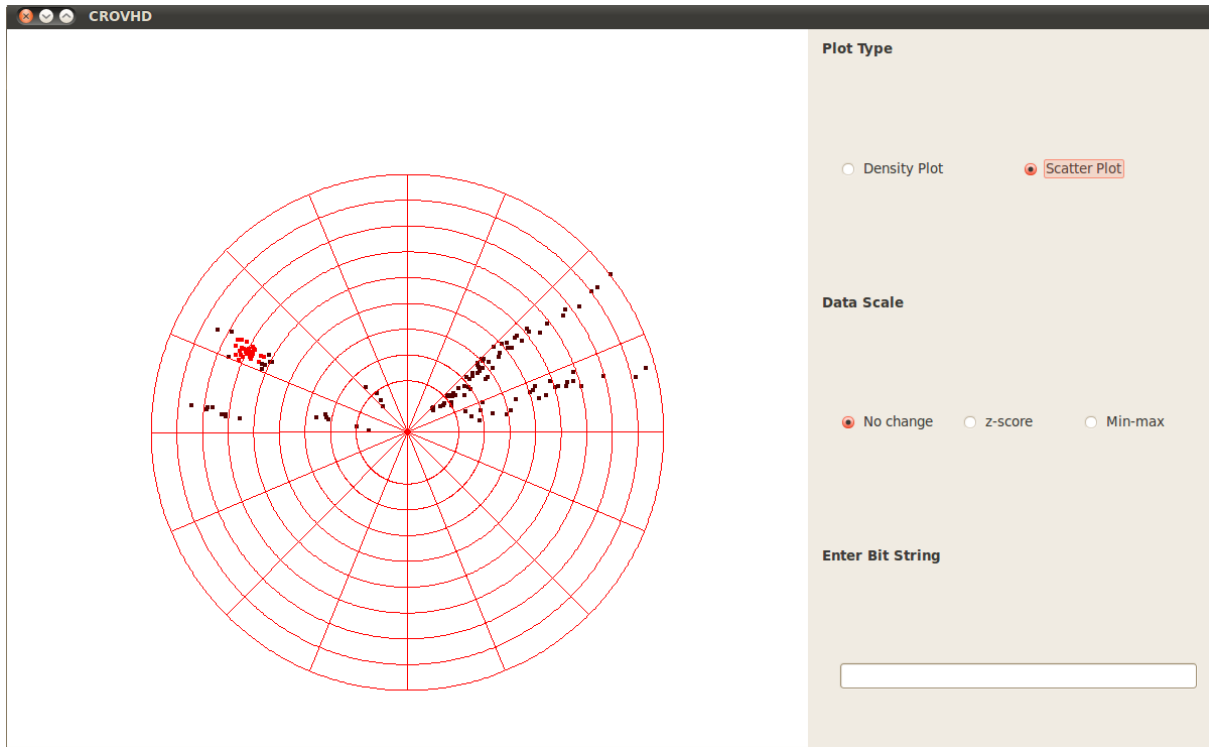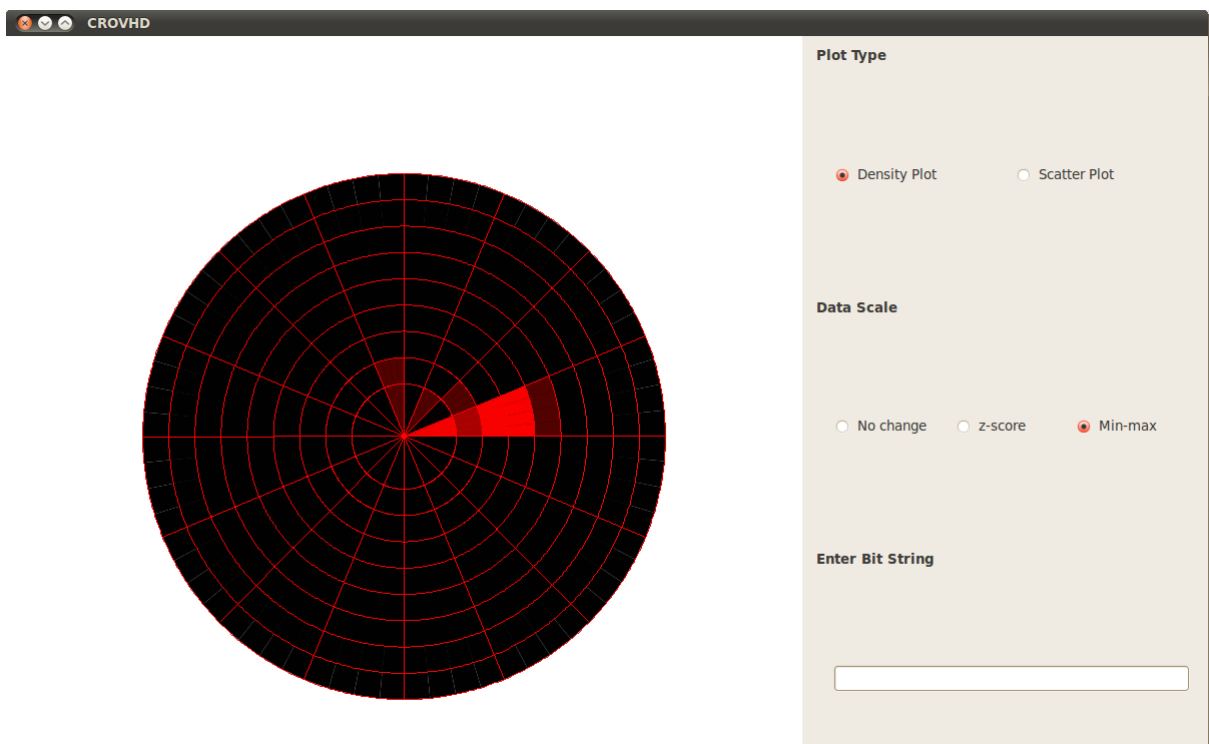
Fig 2: Scatter plot

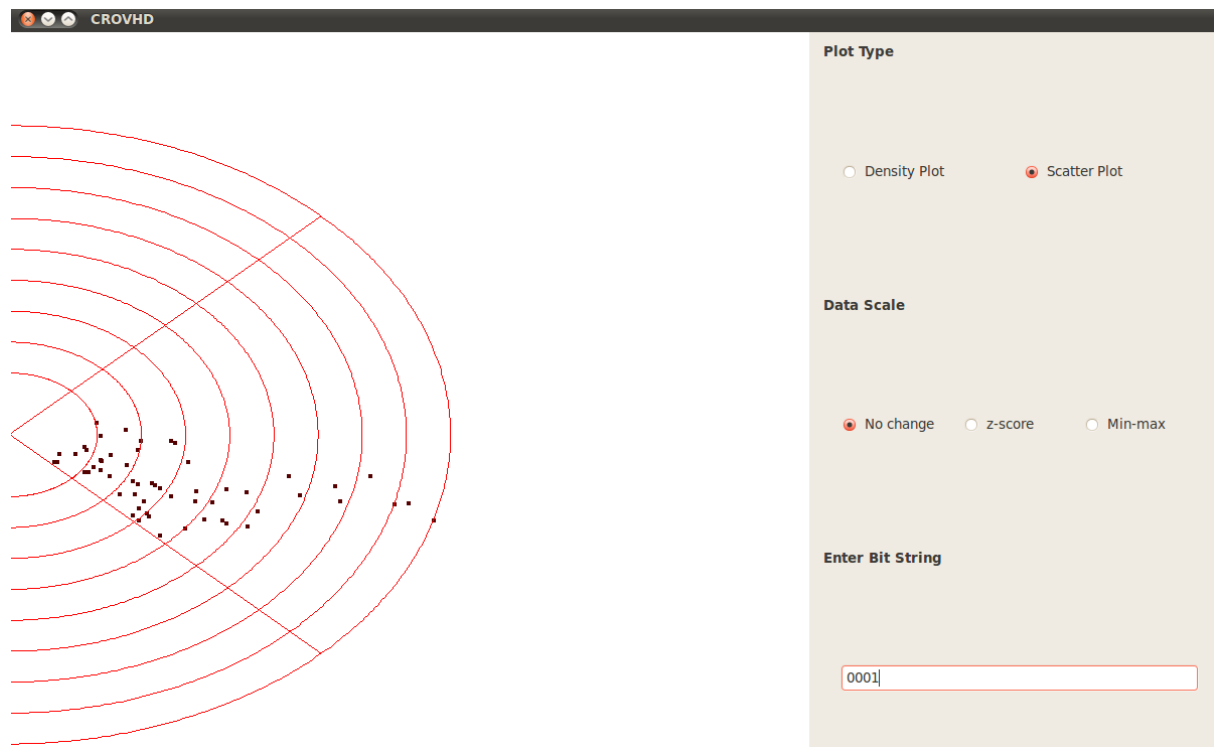

Fig 3: density plot where the values are normalized(min-max normalization)

Fig 4: scatter plot for quadrant 2(bitstring: 0001)