

Figure 1: Setting up a Predictive model and applying it to the test set for validation

(a) Exploratory graph: Training set data for subject 1 has been plotted with tGravity Acceleration Max in X and Y dir. and colored by the type of activity. These features separate the sedentary activities, Laying and Sitting, from the other four activities (b) One of the trees of the random forest has been plotted showing some of the important variables along which data is split. It shows that early in the split Laying, Standing and Sitting can be separated from the three walking activities (c) Graph plots the test set points with tGravity Acceleration Max in X and Y dir. and is colored according to the type of activity. Points which are incorrectly identified are double the size of the other points. The figure shows that the errors are less in identifying sedentary activities i.e. Laying and Sitting and that it is difficult to discern between Walk, Walk up and Walk down.