UbiqLog dataset –

Purpose of dataset –

This is a result of the UbiqLog tool which collects data concerning calls, SMS headers, app use, WIFI and Bluetooth in the surrounding area, geographical location, and physical activities from google play API in a JSON format dataset. This is intended to be for public use and contains several interesting attributes.

Reasons for choosing this dataset-

This dataset provides insight into

Mutlivariate with 98782222 instances in totality, has a mix of categorical and numerical attributes, mostly categorical.

Human activity recognition using smartphones dataset-

Purpose of dataset –

Data was collected from experiments involving a group of 30 volunteers with an age range of 19-48, where each individual was asked to perform six activities, namely walking, walking-upstairs, walking-downstairs, sitting, standing, and laying down whilst wearing a smartphone (a Samsung Galaxy S II). Data was collected using the phones embedded accelerometer and gyroscope capturing linear acceleration in 3 axes and angular velocity in 3 axes at a constant rate of 50Hz. Experiments had video records for manual data labelling and the resultant dataset was partitioned at random into two sets with 70% of volunteers selected for training data and 30% for test data. Accelerometer and gyroscope sensor signals were pre-processed through application of noise filters then sampled in fixed-width sliding windows of 2.56 seconds and a 50% overlap resulting in 128 readings per window. The accelerometer sensor signal had gravitational and body motion components separated using a Butterworth low-pass filter into body acceleration and gravity. Gravitational force is assumed to possess only low frequency components as such a filter with 0.3 Hz cutoff frequency was employed. For each window a vector of features was obtained by variable calculation from time and frequency domain.