Assignment 2

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INF 385T – Personal Informatics
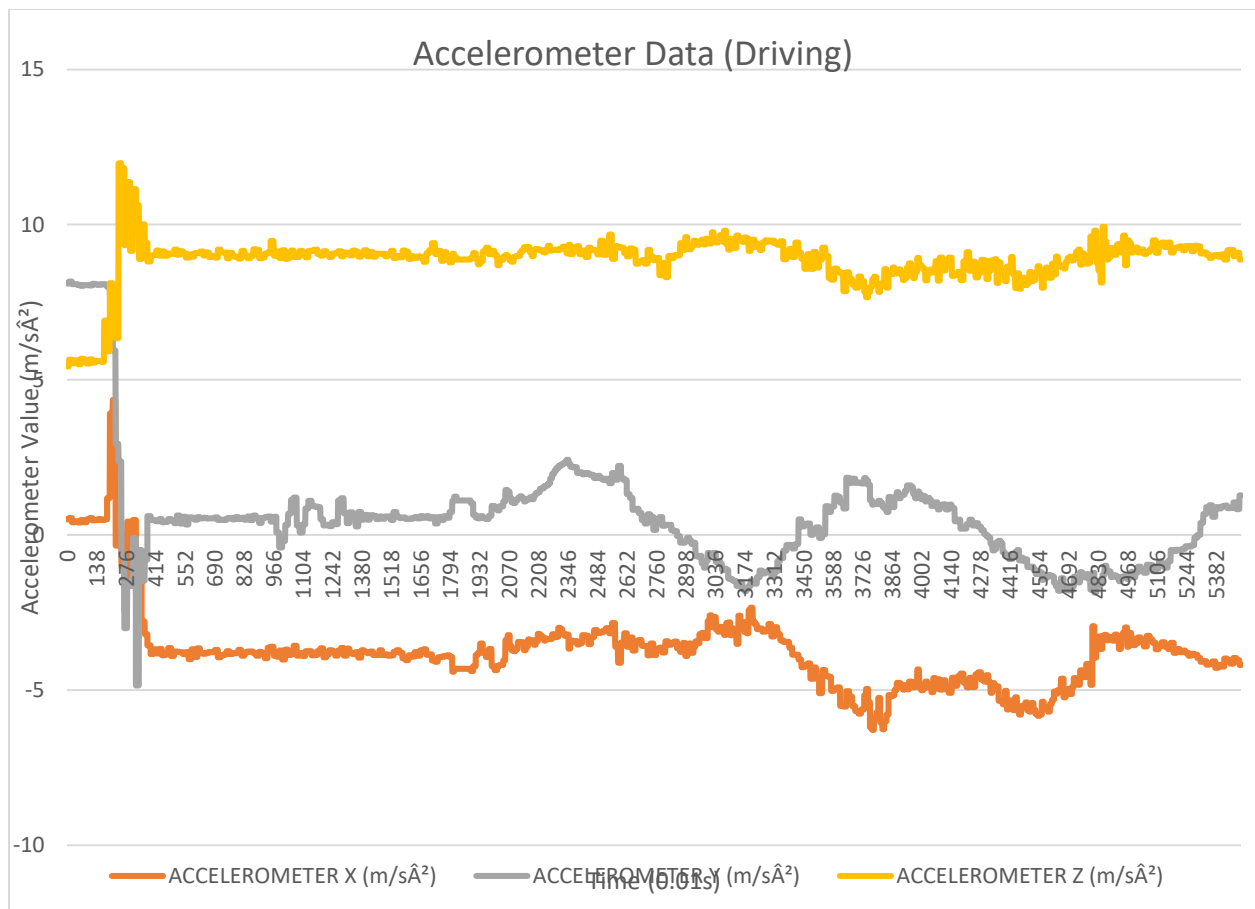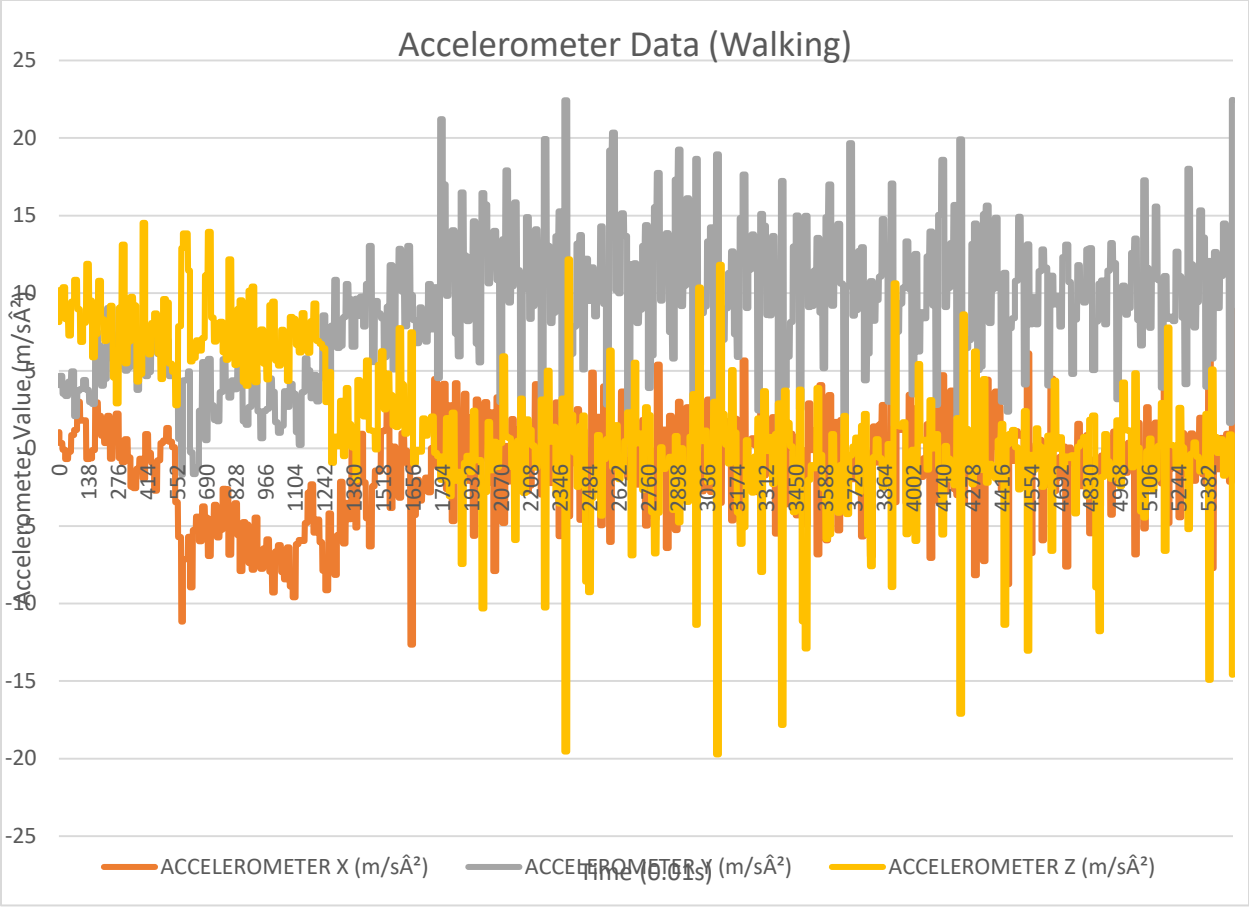
1. Setup

I downloaded and installed AndroSensor for this assignment.
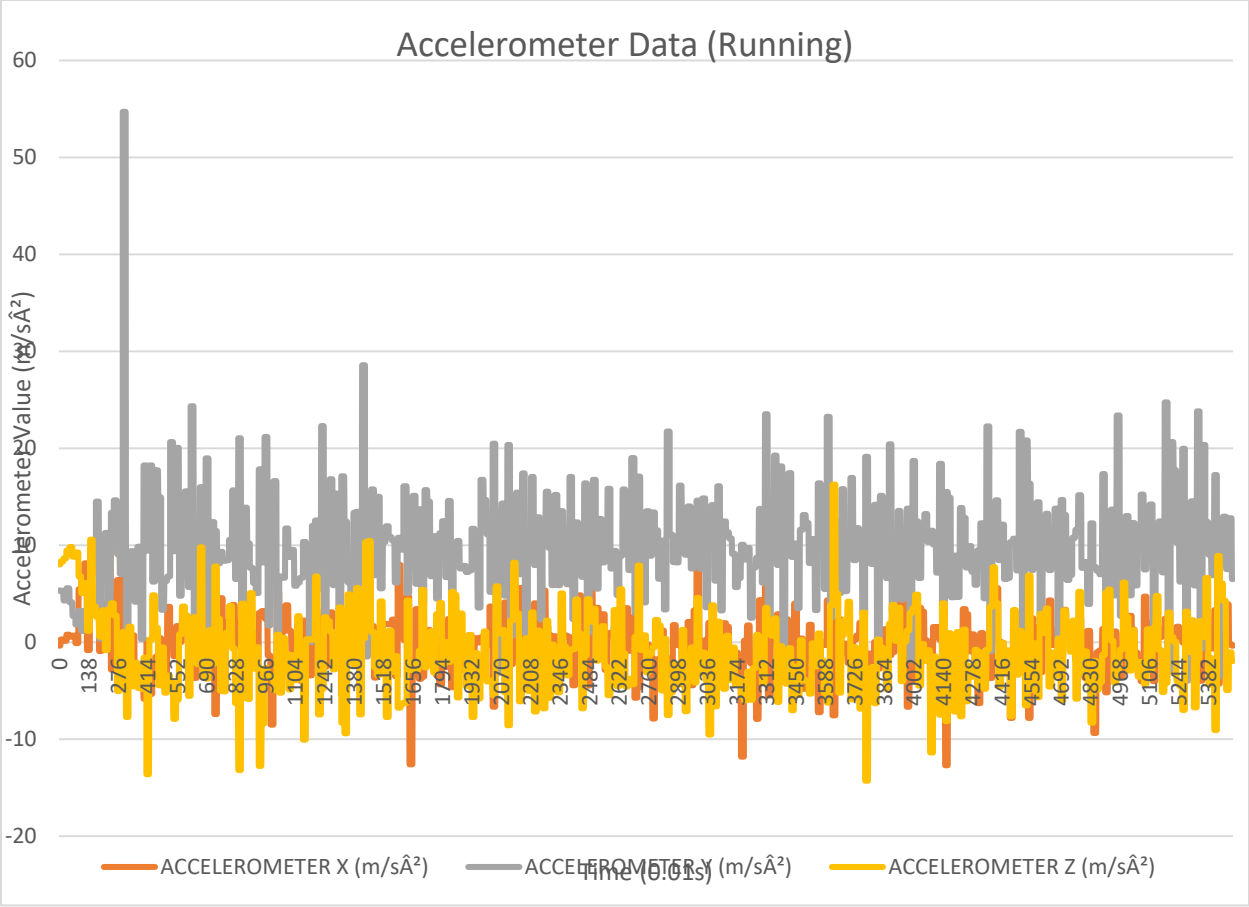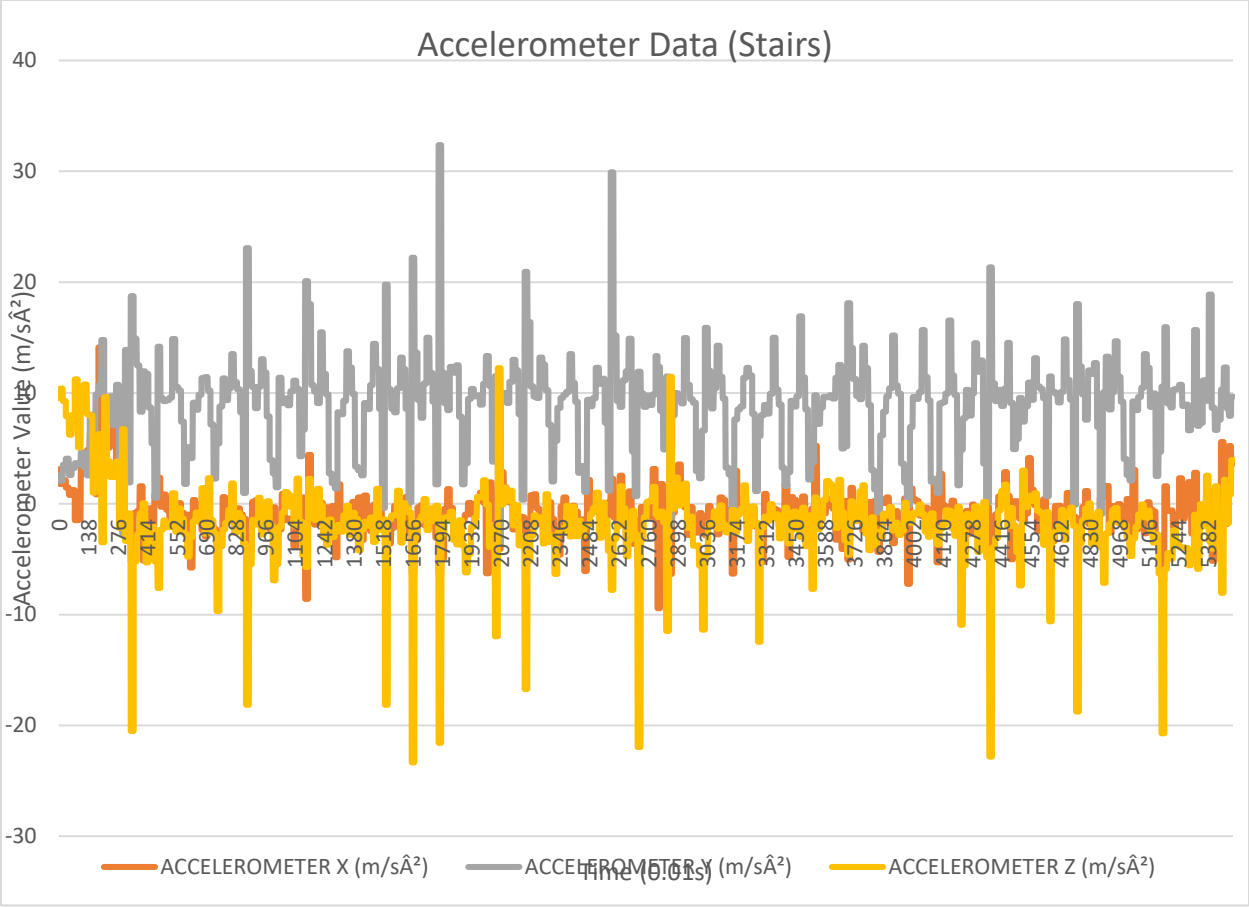
2. Data Collection

The collected data is attached with this report.

3. Visualization

Accelerometer Data (Walking)

Accelerometer Value (m/sÂ²)

Time (0.01s)

25
20
15
10
5
0
-5
-10
-15
-20
-25

0 138 276 414 552 690 828 966 1104 1242 1380 1518 1656 1794 1932 2070 2208 2346 2484 2622 2760 2898 3036 3174 3312 3450 3588 3726 3864 4002 4140 4278 4416 4554 4692 4830 4968 5106 5244 5382

ACCELEROMETER X (m/sÂ²)   ACCELEROMETER Y (m/sÂ²)   ACCELEROMETER Z (m/sÂ²)

Accelerometer Data (Running)
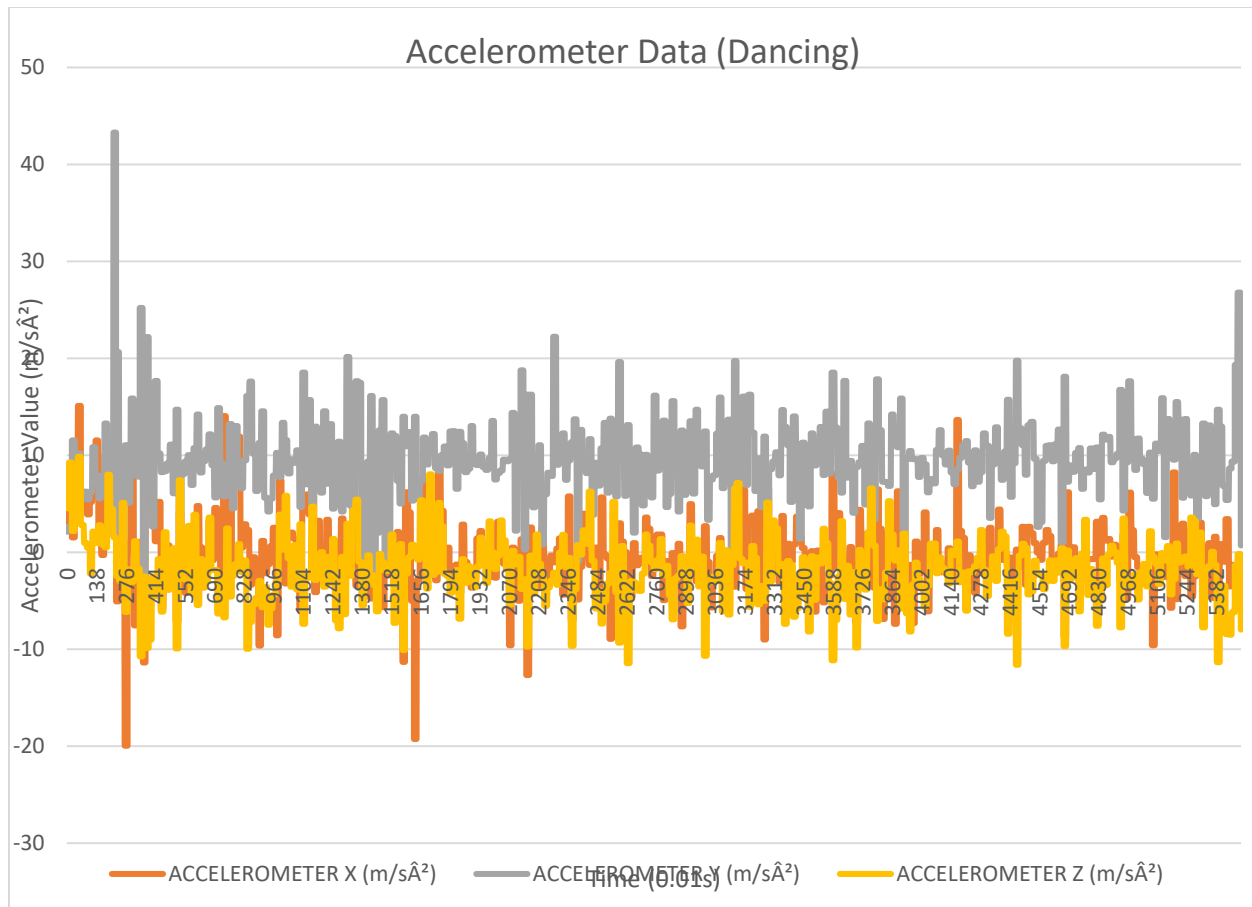
Accelerometer Data (Stairs)

Accelerometer Data (Dancing)

4. Discriminating Activities

The accelerometer data for the driving activity was distinctly different from that of the other activities. The vales followed a smooth, stable curve with slight variations (probably due to turns and stops). The variance was also fairly low. For the walking activity, the variance became much higher, and the range of accelerometer values was from -20 to 20. The visualization for running was similar to that of walking except that the variance and range of values were larger and more compressed (higher frequency). For the stairs activity, the frequency of the variances appeared similar to that of the walking activity for the X and Z values, but the Y accelerometer values are less jagged and less frequent. Finally, for the dancing activity, everything just looked more random. There are hints of all three movement activities (walking, running, stairs) but it is not consistent.