# Title

**Subtitle**

Author

date

Initial Meetings:

- decided on a dataset based on the interesting use cases and oportunities for data handling that the sensor data was to provide.
- the data set turned out to be time series data, which made it much more complex to deal with.
  - decisions needed to be made how to handle the time data, or whether to drop it, and what effect this would have.
- We brainstormed ways to work with the data, which lead us to consider:
  - what relationships between the sensors exist that could describe a persons movement state?
  - do all sensors need to be taken into account, or can we drop some (dimensionality reduction)
  - which are the most important sensors (chest distance from standing, sitting to lying and ankle, movement patterns)

First Experiments:

We graphed the distributions of each sensor (ie, how often does the sensor record a distance between 0 - room max)

It appeared that there were some correlations between labels and individual coordinates, especially for the x-coordinates. After generating this graph we observed there to be fairly long periods of time where one sensor does not provide any data

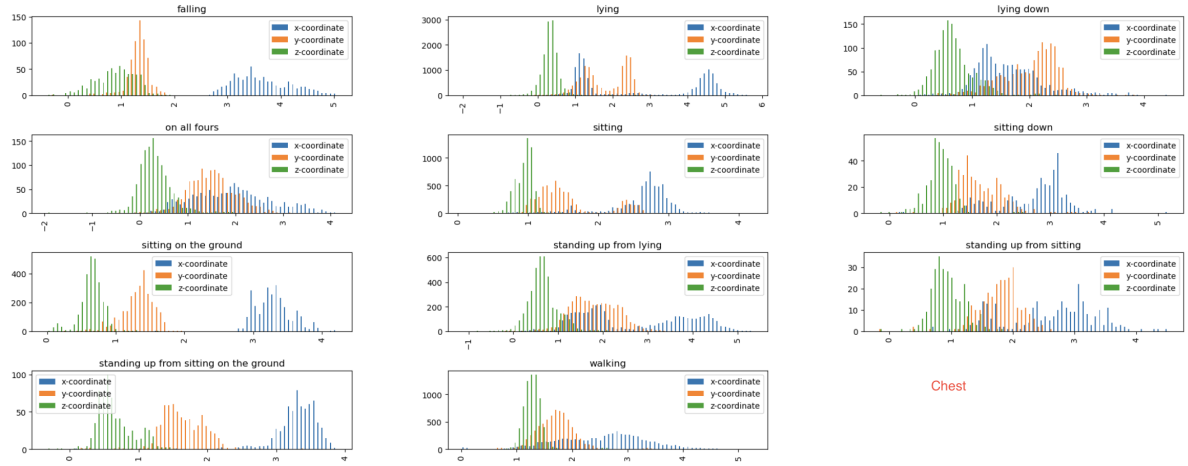


Figure 1: ml-davide-sensordata0

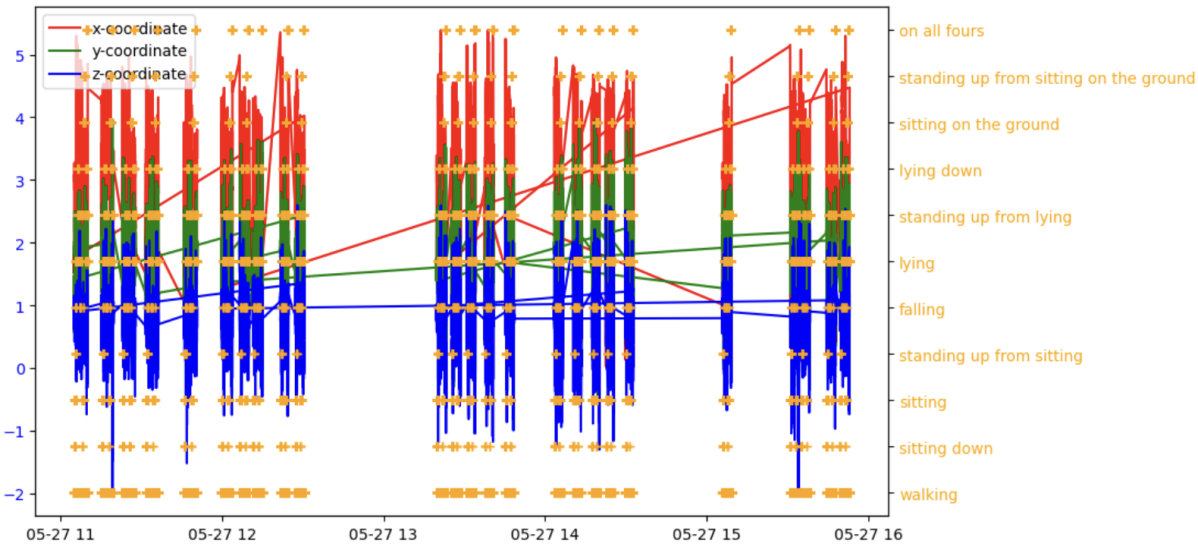


Figure 2: one-param-one-tag