Data Dictionary – Coursera Data Science Specialization

Getting & Cleaning Data Project

SUBJECT_ID:

Integer (range 1 to 30)

30 persons were selected for this experiment, they are labeled using a unique ID from 1 to 30

ACTIVITY_LABEL:

Character

Each activity is explicitly labeled; there are 6 distinct activities:

WALKING

WALKING_UPSTAIRS

WALKING_DOWNSTAIRS

SITTING

STANDING

LAYING

TBODYACC_MEAN_XYZ:

Float (normalized and bounded within [-1, 1])

Mean estimated from the tri-axis (XYZ) raw data collected in the time domain from the accelerometer (body acceleration) at a constant rate of 50 Hz.

TBODYACC_STD_XYZ:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the tri-axis (XYZ) raw data collected in the time domain from the accelerometer (body acceleration) at a constant rate of 50 Hz.

TGRAVITYACC_MEAN_XYZ:

Float (normalized and bounded within [-1, 1])

Mean estimated from the tri-axis (XYZ) raw data collected in the time domain from the accelerometer (gravity acceleration) at a constant rate of 50 Hz.

TGRAVITYACC_STD_XYZ:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the tri-axis (XYZ) raw data collected in the time domain from the accelerometer (gravity acceleration) at a constant rate of 50 Hz.

TBODYACCJERK_MEAN_XYZ:

Float (normalized and bounded within [-1, 1])

Mean estimated from the tri-axis (XYZ) body linear acceleration derived in time.

TBODYACCJERK_STD_XYZ:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the tri-axis (XYZ) body linear acceleration derived in time.

TBODYGYRO_MEAN_XYZ:

Float (normalized and bounded within [-1, 1])

Mean estimated from the tri-axis (XYZ) raw data collected in the time domain from the gyroscope (body acceleration) at a constant rate of 50 Hz.

TBODYGYRO_STD_XYZ:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the tri-axis (XYZ) raw data collected in the time domain from the gyroscope (body acceleration) at a constant rate of 50 Hz.

TBODYGYROJERK_MEAN_XYZ:

Float (normalized and bounded within [-1, 1])

Mean estimated from the tri-axis (XYZ) angular velocity derived in time.

TBODYGYROJERK_STD_XYZ:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the tri-axis (XYZ) angular velocity derived in time.

TBODYACCMAG_MEAN:

Float (normalized and bounded within [-1, 1])

Mean estimated from the magnitude of the tri-axis (XYZ) raw data collected in the time domain from the accelerometer (body acceleration); the Euclidean norm was used for magnitude calculation.

TBODYACCMAG_STD:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the magnitude if the tri-axis (XYZ) raw data collected in the time domain from the accelerometer (body acceleration); the Euclidean norm was used for magnitude calculation.

TGRAVITYACCMAG_MEAN:

Float (normalized and bounded within [-1, 1])

Mean estimated from the magnitude of the tri-axis (XYZ) raw data collected in the time domain from the accelerometer (gravity acceleration); the Euclidean norm was used for the magnitude calculation.

TGRAVITYACCMAG_STD:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the magnitude of the tri-axis (XYZ) raw data collected in the time domain from the accelerometer (gravity acceleration); the Euclidean norm was used for the magnitude calculation.

TBODYACCJERKMAG_MEAN:

Float (normalized and bounded within [-1, 1])

Mean estimated from the magnitude of the tri-axis (XYZ) body linear acceleration derived in time; Euclidean norm was used for the magnitude calculation.

TBODYACCJERKMAG_STD:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the magnitude of the tri-axis (XYZ) body linear acceleration derived in time; Euclidean norm was used for the magnitude calculation.

TBODYGYROMAG_MEAN:

Float (normalized and bounded within [-1, 1])

Mean estimated from the magnitude of the tri-axis (XYZ) raw data collected in the time domain from the gyroscope (body acceleration) at a constant rate of 50 Hz; Euclidean norm was used for the magnitude calculation.

TBODYGYROMAG_STD:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the magnitude of the tri-axis (XYZ) raw data collected in the time domain from the gyroscope (body acceleration) at a constant rate of 50 Hz; Euclidean norm was used for the magnitude calculation.

TBODYGYROJERKMAG_MEAN:

Float (normalized and bounded within [-1, 1])

Mean estimated from the magnitude of the tri-axis (XYZ) angular velocity derived in time; Euclidean norm was used for the magnitude calculation.

TBODYGYROJERKMAG_STD:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the magnitude of the tri-axis (XYZ) angular velocity derived in time; Euclidean norm was used for the magnitude calculation.

FBODYACC_MEAN_XYZ:

Float (normalized and bounded within [-1, 1])

Mean estimated from the Fast Fourier Transform applied to the tri-axis (XYZ) raw data collected in the time domain from the accelerometer (body acceleration) at a constant rate of 50 Hz.

FBODYACC_STD_XYZ:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the Fast Fourier Transform applied to the tri-axis (XYZ) raw data collected in the time domain from the accelerometer (body acceleration) at a constant rate of 50 Hz.

FBODYACCJERK_MEAN_XYZ:

Float (normalized and bounded within [-1, 1])

Mean estimated from the Fast Fourier Transform applied to the tri-axis (XYZ) body linear acceleration derived in time.

FBODYACCJERK_STD_XYZ:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the Fast Fourier Transform applied to the tri-axis (XYZ) body linear acceleration derived in time.

FBODYGYRO_MEAN_XYZ:

Float (normalized and bounded within [-1, 1])

Mean estimated from the Fast Fourier Transform applied to the tri-axis (XYZ) raw data collected in the time domain from the gyroscope (body acceleration) at a constant rate of 50 Hz.

FBODYGYRO_STD_XYZ:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the Fast Fourier Transform applied to the tri-axis (XYZ) raw data collected in the time domain from the gyroscope (body acceleration) at a constant rate of 50 Hz.

FBODYACCMAG_MEAN:

Float (normalized and bounded within [-1, 1])

Mean estimated from the Fast Fourier Transform applied to the magnitude of the tri-axis (XYZ) raw data collected in the time domain from the accelerometer (body acceleration); the Euclidean norm was used for magnitude calculation.

FBODYACCMAG_STD:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the Fast Fourier Transform applied to the magnitude of the tri-axis (XYZ) raw data collected in the time domain from the accelerometer (body acceleration); the Euclidean norm was used for magnitude calculation.

FBODYACCJERKMAG_MEAN:

Float (normalized and bounded within [-1, 1])

Mean estimated from the Fast Fourier Transform applied to the magnitude of the tri-axis (XYZ) body linear acceleration derived in time; Euclidean norm was used for the magnitude calculation.

FBODYACCJERKMAG_STD:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the Fast Fourier Transform applied to the magnitude of the tri-axis (XYZ) body linear acceleration derived in time; Euclidean norm was used for the magnitude calculation.

FBODYGYROMAG_MEAN:

Float (normalized and bounded within [-1, 1])

Mean estimated from the Fast Fourier Transform applied to the magnitude of the tri-axis (XYZ) raw data collected in the time domain from the gyroscope (body acceleration) at a constant rate of 50 Hz; Euclidean norm was used for the magnitude calculation.

FBODYGYROMAG_STD:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the Fast Fourier Transform applied to the magnitude of the tri-axis (XYZ) raw data collected in the time domain from the gyroscope (body acceleration) at a constant rate of 50 Hz; Euclidean norm was used for the magnitude calculation.

FBODYGYROJERKMAG_MEAN:

Float (normalized and bounded within [-1, 1])

Mean estimated from the Fast Fourier Transform applied to the magnitude of the tri-axis (XYZ) angular velocity derived in time; Euclidean norm was used for the magnitude calculation.

FBODYGYROJERKMAG_STD:

Float (normalized and bounded within [-1, 1])

Standard deviation estimated from the Fast Fourier Transform applied to the magnitude of the tri-axis (XYZ) angular velocity derived in time; Euclidean norm was used for the magnitude calculation.