

Dataset description

March 2021

1 Gesture Phase Recognition

Choose the training dataset, with the same number of the two final digits of your student number. For instance if your student number is 123456, choose the [phpYleydd_train_06.csv](#), or if it is 654321, choose the training set [phpYleydd_train_21.csv](#)

The dataset is composed by features extracted from 7 videos with people gesticulating, aiming at studying Gesture Phase Segmentation. Each video is represented by a processed file, which contains velocity and acceleration of hands and wrists.

Attribute Information

Processed file has 32 numeric attributes (double) and a class attribute (nominal). A feature vector with up to 50 numeric attributes can be generated with the two files mentioned above. The objective of this database is to predict the phases. This is the processed data set with the following feature description:

- 1 Vectorial velocity of left hand (x coordinate)
- 2 Vectorial velocity of left hand (y coordinate)
- 3 Vectorial velocity of left hand (z coordinate)
- 4 Vectorial velocity of right hand (x coordinate)
- 5 Vectorial velocity of right hand (y coordinate)
- 6 Vectorial velocity of right hand (z coordinate)
- 7 Vectorial velocity of left wrist (x coordinate)
- 8 Vectorial velocity of left wrist (y coordinate)
- 9 Vectorial velocity of left wrist (z coordinate)
- 10 Vectorial velocity of right wrist (x coordinate)
- 11 Vectorial velocity of right wrist (y coordinate)
- 12 Vectorial velocity of right wrist (z coordinate)

- 13 Vectorial acceleration of left hand (x coordinate)
- 14 Vectorial acceleration of left hand (y coordinate)
- 15 Vectorial acceleration of left hand (z coordinate)
- 16 Vectorial acceleration of right hand (x coordinate)
- 17 Vectorial acceleration of right hand (y coordinate)
- 18 Vectorial acceleration of right hand (z coordinate)
- 19 Vectorial acceleration of left wrist (x coordinate)
- 20 Vectorial acceleration of left wrist (y coordinate)
- 21 Vectorial acceleration of left wrist (z coordinate)
- 22 Vectorial acceleration of right wrist (x coordinate)
- 23 Vectorial acceleration of right wrist (y coordinate)
- 24 Vectorial acceleration of right wrist (z coordinate)
- 25 Scalar velocity of left hand
- 26 Scalar velocity of right hand
- 27 Scalar velocity of left wrist
- 28 Scalar velocity of right wrist
- 29 Scalar velocity of left hand
- 30 Scalar velocity of right hand
- 31 Scalar velocity of left wrist
- 32 Scalar velocity of right wrist
- 33 phase (to predict):
 - D (rest position, from portuguese "descanso")
 - P (preparation)
 - S (stroke)
 - H (hold)
 - R (retraction)

Number of instances/examples: 9837

- `phpYLeYdd_train_*.csv` : 7869 for train and validation.
- `phpYLeYdd_test.csv`: 1968