**54.Wearable Computing: Classification of Body Postures and Movements (PUC-Rio)**

1. 数据库网址

https://archive.ics.uci.edu/ml/datasets/Wearable+Computing%3A+Classification+of+Body+Postures+and+Movements+(PUC-Rio)

2. 数据库描述

【1.[数据集名称]数据集由[机构名或人名]采集；】The data used in our experiments were collected by Pontifical Catholic University of Rio de Janeiro (PUC-Rio) .【2.用于[什么实验目的]】We used to classify the activities of 4 healthy subjects.【3】we have lower performance on 'leave-one-subject-out' tests. The performance baseline index we established is for 10-fold cross-validation tests. Therefore, there's much more space for optimization in subject independent tests. A dataset with 5 classes (sitting-down, standing-up, standing, walking, and sitting) collected on 8 hours of activities of 4 healthy subjects. We also established a baseline performance index. The detailed information can be described as user, gender, age, how\_tall\_in\_meters, weight, body\_mass\_index,x(1-4),y(1-4),z(1-4).【4】The database has 165632 samples, respectively belong to training with 3823 samples and testing with 1797 samples. The categories can be as shown in Table 1.

Table 1 Category Distribution of dataset [根据数据库绘制]

|  |  |  |  |
| --- | --- | --- | --- |
| Categories | Training | Testing | Total Number of Samples |
| A | 41262 | 10315 | 51577 |
| B | 39838 | 9959 | 49797 |
| C | 40879 | 10219 | 51098 |
| D | 10529 | 2632 | 13161 |
| Total number of samples in total | 132506 | 33126 | 165632 |

3. 精简描述

The Data in our experiment were collected by Pontifical Catholic University of Rio de Janeiro (PUC-Rio) . The dataset includes have 165632 samples, which used to classify the activities of 4 healthy subjects. Through which, we divided the dataset into two part, training data set with 132506 samples and forecasting data set with 33126 samples.