**70.OPPORTUNITY Activity Recognition**

1. 数据库网址

https://archive.ics.uci.edu/ml/datasets/OPPORTUNITY+Activity+Recognition

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 Daniel Roggen, Wearable Computing Laboratory ETH Zurich.【2.用于[什么实验目的]】The database devised to benchmark human activity recognition algorithms.【3】The dataset comprises the readings of motion sensors recorded while users executed typical daily activities: (a)Body-worn sensors: 7 inertial measurement units, 12 3D acceleration sensors, 4 3D localization information;(b) Object sensors: 12 objects with 3D acceleration and 2D rate of turn;(c) Ambient sensors: 13 switches and 8 3D acceleration sensors;(d)Recordings: 4 users, 6 runs per users. Of these, 5 are Activity of Daily Living runs characterized by a natural execution of daily activities. The 6th run is a "drill" run, where users execute a scripted sequence of activities.(e) Annotations/classes: the activities of the user in the scenario are annotated on different levels: "modes of locomotion" classes; low-level actions relating 13 actions to 23 objects; 17 mid-level gesture classes; and 5 high-level activity classes. The dataset comprises the readings of motion sensors recorded while users executed typical daily activities. The detailed format is described in the package. The attributes correspond to raw sensor readings. There is a total of 242 attributes.【4】The database has 2640 samples, respectively belong to training with 2112 samples and testing with 528 samples. As shown in Table 1.

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

|  |  |  |  |
| --- | --- | --- | --- |
| Categories | Training | Testing | Total Number of Samples |
| walk | 1131 | 283 | 1414 |
| stand | 834 | 209 | 1043 |
| lie | 45 | 11 | 56 |
| sit | 102 | 25 | 127 |
| Total number of samples in total | 2112 | 528 | 2640 |

3. 精简描述

The Data in our experiment were collected by Daniel Roggen, Wearable Computing Laboratory ETH Zurich. The dataset includes have 2640 samples, which used to classify the activity. Through which, we divided the dataset into two part, training data set with 2112 samples and forecasting data set with528 samples.