**67.Mobile Robots**

1. 数据库网址

http://archive.ics.uci.edu/ml/datasets/Mobile+Robots

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 Volker Klingspor, Katharina J. Morik, Anke D. Rieger, from Computer Science Dept. LS VIII, University of Dortmund.【2.用于[什么实验目的]】We used preprocessing programs made available by NIST to extract normalized bitmaps of handwritten digits from a preprinted form.【3】The attributes are Tr (Trace) (integer) , T (Time) (integer) ,S (Sensor) (integer 0-23) ,Or (Orientation) (real 0-360) ,Sa (S-Orientation) (real 0-360) ,Gr (Gradient) (real) ,Dist (Distance) (real) ,Sx,Sy ,(Sensor-coordinates) (real) ,Obj (Object) (integer) ,E (Edge) (integer) ,S\_C (Sensorclass) (set of front\_side, right\_side, back\_side, left\_side) ,Mv (Movement) (set of parallel, diagonal) ,MD (MoveDirection) (set of forward, backward, right, left) ,PD (PerceptionDir.) (set of front, rear, right, left) ,Perc (perceptual features) and so on.【4】The database has 17589 samples, respectively belong to training with 9362 samples and testing with 8227 samples. As shown in Table 1.

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

|  |  |  |  |
| --- | --- | --- | --- |
| Categories | training | testing | Total Number of Samples |
| Baseic feature set1 | 4572 | 541 | 5113 |
| Baseic feature set2 | 3278 | 2960 | 6238 |
| Baseic feature set3 | 5543 | 695 | 6238 |
| Total number of samples in total | 9362 | 8227 | 17589 |

3. 精简描述

The Data in our experiment were collected by Volker Klingspor, Katharina J. Morik, Anke D. Rieger, from Computer Science Dept. LS VIII, University of Dortmund. The dataset includes have 17589 samples, which used to preprocessing programs made available by NIST to extract normalized bitmaps of handwritten digits from a preprinted form. Through which, we divided the dataset into two part, training data set with 9362 samples and forecasting data set with 8227 samples.