**53.Image Segmentation**

1. 数据库网址

http://archive.ics.uci.edu/ml/datasets/Image+Segmentation

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 Vision Group, University of Massachusetts.【2.用于[什么实验目的]】We used to classify the image.【3】The instances were drawn randomly from a database of 7 outdoor images. The images were handsegmented to create a classification for every pixel. Each instance is a 3x3 region. Number of Attributes has 19 continuous attributes, each attribute can decribles as region-centroid-col、region-centroid-row、region-pixel-count、short-line-density-5、short-line-density-2、 vedge-mean、vegde-sd、hedge-mean、hedge-sd、intensity-mean、rawred-mean、rawblue-mean、rawgreen-mean、exred-mean、exblue-mean、exgreen-mean、value-mean、saturatoin-mean、hue-mean.【4】The database has 2310 samples, respectively belong to training with 210 samples and testing with 2100 samples. The categories of network system include seven categories, as shown in Table 1.

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

|  |  |  |  |
| --- | --- | --- | --- |
| Categories | Traning | Testing | Total Number of Samples |
| Brickface | 30 | 300 | 330 |
| sky | 30 | 300 | 330 |
| Foliage | 30 | 300 | 330 |
| Cement | 30 | 300 | 330 |
| window | 30 | 300 | 330 |
| Path | 30 | 300 | 330 |
| grass | 30 | 300 | 330 |
| Total number of samples in total | 210 | 2100 | 2310 |

3. 精简描述

The Data in our experiment were collected by Vision Group, University of Massachusetts. The dataset includes have 2310 samples, which used to classify the image. Through which, we divided the dataset into two part, training data set with 210 samples and forecasting data set with 2100 samples.