

Dataset description

March 2021

1 Abalone age Prediction Dataset

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 `abalone_train_06.csv`, or if it is 654321, choose the training set `abalone_train_21.csv`

Predicting the age of abalone from physical measurements. The age of abalone is determined by cutting the shell through the cone, staining it, and counting the number of rings through a microscope, a time-consuming task. Other measurements, which are easier to obtain, are used to predict the age.

Attribute Information

The number of rings is the value to predict: either as a continuous value or as a classification problem. The attributes of the dataset are as below:

| Name | Data Type | Measure | Description |
|----------------|------------|-------------|-----------------------------|
| ----- | ----- | ----- | ----- |
| Sex | nominal | M, F, and I | (infant) |
| Length | continuous | mm | Longest shell measurement |
| Diameter | continuous | mm | perpendicular to length |
| Height | continuous | mm | with meat in shell |
| Whole weight | continuous | grams | whole abalone |
| Shucked weight | continuous | grams | weight of meat |
| Viscera weight | continuous | grams | gut weight (after bleeding) |
| Shell weight | continuous | grams | after being dried |
| Rings | integer | | +1.5 gives the age in years |

There are 29 Rings labels to predict are: $1, 2, \dots, 29$

Number of instances/examples: 4178

- `abalone_train_*.csv` : 3342 for train and validation.
- `abalone_test.csv`: 836