**Data Mining Term Project**

1. **Introduction :**

**Wine quality is widely used in machine learning and data mini-ng, therefore, this are our study subject of data mining.**

**Wine quality frequently influenced by climate, weather, temper-ature and the winemaking process that are not the indicators we u-sed in dataset, instead ,there are objectivie attributes, such as, vola-tile acidity, sulphate, sulfur dioxide.**

**After we learnt plenty of methods of data mining to find the ru-les of classification, we can now practice and compare it by Weka.**

1. **Preprocess(Related Work) :**

因為是從網站上直接抓下來知名的dataset，檢查過後並沒有任何Data Missing的情況。

1. **Mine the Data :**

We test the following methods to find the rule of data where we could calculate accuracy by classifying the test set.

There are two major way to find the rule, first, using the classifier functions or Decision trees .Second, clustering the data and we evaluation the clusters to their possible classes.

* MultiLayerPerceptron
* IBK(K-nearest)
* RandomForest
* J48
* K-means with *Classes to clusters evaluation*

1. **Experiments :**
2. **Conclusion :**

**Reference :**

資料是由Paulo Cortez (Univ. Minho), Antonio Cerdeira, Fernando Almeida, Telmo Matos and Jose Reis (CVRVV) @ 2009提供

