

Weka[13] Ensemble

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这一篇介绍一下如何使用 Ensemble 的类, 不过提醒一下, 不要什么都来个 Ensemble, 对这种毫无想象力可言的 做法, 我真是有点无语。

我已经写了这么多篇了, 我也有点累了, 这篇也是有人发 E-mail 让我写的。大家就先自己看吧, 至于是不是对的, 我以后有机会了我看了, 再告诉大家了。

```
package instanceTest;

import java.io.FileReader;

import weka.classifiers.Classifier;
import weka.classifiers.bayes.NaiveBayes;
import weka.classifiers.functions.LibSVM;
import weka.classifiers.functions.SMO;
import weka.classifiers.meta.AdaBoostM1;
import weka.classifiers.meta.Vote;
import weka.classifiers.trees.J48;
import weka.core.Instances;
import weka.core.SelectedTag;

public class EnsembleTest
{
    private Instances m_instances = null;

    public void getFileInstances( String fileName ) throws Exception
    {
        FileReader frData = new FileReader( fileName );
        m_instances = new Instances( frData );

        m_instances.setClassIndex( m_instances.numAttributes()
            - 1 );
    }

    public void AdaBoostClassify() throws Exception
    {
        LibSVM baseClassifier = new LibSVM();
        AdaBoostM1 classifier = new AdaBoostM1();
        classifier.setClassifier( baseClassifier );

        classifier.buildClassifier( m_instances );
        System.out.println( classifier.
```

```

        classifyInstance( m_instances.instance( 0 ) ) );
    }

    public void VoteClassify() throws Exception
    {
        Classifier baseClassifiers[] = new Classifier[3];
        baseClassifiers[0] = new J48();
        baseClassifiers[1] = new NaiveBayes();
        baseClassifiers[2] = new SMO();

        Vote classifier = new Vote();
        SelectedTag tag = new SelectedTag(Vote.MAJORITY_VOTING_RULE,
            Vote.TAGS_RULES);
        classifier.setCombinationRule( tag );
        classifier.setClassifiers( baseClassifiers );

        classifier.buildClassifier( m_instances );
        System.out.println( classifier.
            classifyInstance( m_instances.instance( 0 ) ) );
    }

    public static void main( String[] args ) throws Exception
    {
        EnsembleTest etest = new EnsembleTest();
        etest.getFileInstances( "F://Program Files//Weka-3-6//data//
            contact-lenses.arff" );
        etest.AdaBoostClassify();
        etest.VoteClassify();
    }
}

```