

## Writeup

### 1. My features.

- 1). If the sentence contains one or more common Dutch word, then it is Dutch.
- 2). If the sentence does not contain any of common English word, then it is Dutch.
- 3). Most of Dutch words contain 'aa'. If the sentence contains 'aa', then it is Dutch.
- 4). Most of Dutch words contain 'ij'. If the sentence contains 'ij', then it is Dutch.
- 5). Most of Dutch words contain 'oo'. If the sentence contains 'oo', then it is Dutch.
- 6). Most of Dutch words contain 'ee'. If the sentence contains 'ee', then it is Dutch.
- 7). 'de' is a general word in Dutch. If the sentence contains ' de ' word, then it is Dutch.
- 8). Most of Dutch words contain 'en'. If the sentence contains 'en', then it is Dutch.
- 9). 'een' is a general word in Dutch. If the sentence contains ' een ' word, then it is Dutch.
- 10). 'van' is a general word in Dutch. If the sentence contains ' van ' word, then it is Dutch.

## 2. Decision tree learning

My algorithm is the DECISION-TREE-LEARNING algorithm covered in the class. And I used a class 'DecisionTree' to build my decision tree. And my result is 100% accuracy.

## 3. Boosting

My algorithm is the ADABOOST algorithm covered in the class. And my stump is 10. And my result is 95% accuracy.