**Dataset**: *plant.wsd*

**How Complete your program is?**

The program is 100% complete.

* Initially it converts the datasets from XML to straight forward text format. Next, I have taken the left word to the head and right word to the head as my features.
* I have then taken the counts of the sense-id’s, the feature with the sense etc. After which I have estimated the P (feature |sense), P(feature), P(sense).
* The program determines the total number of instances and possible sense labels
* It creates 5 folds for five-fold cross-validation
* In each fold, it takes one-fold as test set and the remaining as training set
* Finally, it evaluates the performance by comparing the predicted made by the system against the available sense-ids

**Accuracies of each of the fold?**

**Text

Description automatically generated**

**Average accuracy**

****

**Three errors**

My implementation resulted in overall accuracy of 53%

* I have noticed a few words are predicted with the wrong sense, the reason being the more the number of senses a word has
* There were some words without the features in the train set, which resulted in wrong predictions
* Many of the ambiguous words were surrounded by low frequency words

**Dataset**: *bass.wsd*

**How Complete your program is?**

The program is 100% complete.

* Initially it converts the datasets from XML to straight forward text format. Next, I have taken the left word to the head and right word to the head as my features.
* I have then taken the counts of the sense-id’s, the feature with the sense etc. After which I have estimated the P (feature |sense), P(feature), P(sense).
* The program determines the total number of instances and possible sense labels
* It creates 5 folds for five-fold cross-validation
* In each fold, it takes one-fold as test set and the remaining as training set
* Finally, it evaluates the performance by comparing the predicted made by the system against the available sense-ids

**Accuracies of each of the fold?**

**Text

Description automatically generated**

**Average accuracy**

****

**Dataset**: *crane.wsd*

**How Complete your program is?**

The program is 100% complete.

* Initially it converts the datasets from XML to straight forward text format. Next, I have taken the left word to the head and right word to the head as my features.
* I have then taken the counts of the sense-id’s, the feature with the sense etc. After which I have estimated the P (feature |sense), P(feature), P(sense).
* The program determines the total number of instances and possible sense labels
* It creates 5 folds for five-fold cross-validation
* In each fold, it takes one-fold as test set and the remaining as training set
* Finally, it evaluates the performance by comparing the predicted made by the system against the available sense-ids

**Accuracies of each of the fold?**

**Text

Description automatically generated**

**Average accuracy**



**Dataset**: *motion.wsd*

**How Complete your program is?**

The program is 100% complete.

* Initially it converts the datasets from XML to straight forward text format. Next, I have taken the left word to the head and right word to the head as my features.
* I have then taken the counts of the sense-id’s, the feature with the sense etc. After which I have estimated the P (feature |sense), P(feature), P(sense).
* The program determines the total number of instances and possible sense labels
* It creates 5 folds for five-fold cross-validation
* In each fold, it takes one-fold as test set and the remaining as training set
* Finally, it evaluates the performance by comparing the predicted made by the system against the available sense-ids

**Accuracies of each of the fold?**

**Text

Description automatically generated**

**Average accuracy**

****

**Dataset**: *palm.wsd*

**How Complete your program is?**

The program is 100% complete.

* Initially it converts the datasets from XML to straight forward text format. Next, I have taken the left word to the head and right word to the head as my features.
* I have then taken the counts of the sense-id’s, the feature with the sense etc. After which I have estimated the P (feature |sense), P(feature), P(sense).
* The program determines the total number of instances and possible sense labels
* It creates 5 folds for five-fold cross-validation
* In each fold, it takes one-fold as test set and the remaining as training set
* Finally, it evaluates the performance by comparing the predicted made by the system against the available sense-ids

**Accuracies of each of the fold?**

**Text

Description automatically generated**

**Average accuracy**



**Dataset**: *tank.wsd*

**How Complete your program is?**

The program is 100% complete.

* Initially it converts the datasets from XML to straight forward text format. Next, I have taken the left word to the head and right word to the head as my features.
* I have then taken the counts of the sense-id’s, the feature with the sense etc. After which I have estimated the P (feature |sense), P(feature), P(sense).
* The program determines the total number of instances and possible sense labels
* It creates 5 folds for five-fold cross-validation
* In each fold, it takes one-fold as test set and the remaining as training set
* Finally, it evaluates the performance by comparing the predicted made by the system against the available sense-ids

**Accuracies of each of the fold?**

**Text

Description automatically generated**

**Average accuracy**

