UNIVERSITY OF TRENTO - Italy
Information Engineering
and Computer Science Department

Master Degree in Computer Science

Distributed Algorithms

AA 2015-2016

Implementation of BenOR algorithm using C++ and MPI

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September 16, 2016

Abstract

This is a description of project on distributed algorithms course.

1 Introduction to the designed system/experiment (project work)

2 The analytical model

2.1 Pre-processing (stemming, lemmatization, tokenization. . .)

2.2 Weigthing Schemes (if used)

2.3 Feature Selectors if used

2.4 Formal description of any new model added

3 Initial Software description (brief)

3.1 Used Functions

3.2 Interface (Java classes if applicable)

4 System/model implementation description

4.1 Procedure/Object Diagram

4.2 Interfaces to the basic software

5 Experiment Description

5.1 Data (corpora)

i. Number of documents/instances
ii. Number of categories
iii. Number of features

5.2 Parameterization (thresholds and other values)

5.3 Number of documents in test and training set

5.4 If used, also describe the validation-set

6 Result presentation:

6.1 For all categories (Microaverage and Macroaverage of Precision, Recall and F1-measure)

6.2 Single category

6.3 Baseline systems or previous work systems' results

6.4 Comparative Tables from the baseline to the best model (passing trough the other models)

6.5 Precision/Recall graph by varying threshold

7 Discussion

7.1 Basic considerations on the starting software and the obtained improvement (of such software)

7.2 Implementation problems and some characteristics of implemantation (e.g. computational complexity, execution time and usability).

7.3 Comparison among different presented models (explanation of the improvement or decrease in accuracy)

8 Conclusion

8.1 The main (and few) main points and results of your work