Concept Mapping

R&D Report

Ву

Ankith M S and Sandip Ghoshal,
Under the guidance of Prof. Ganesh Ramakrishnan
Department of Computer Science
Indian Institute of Technology, Bombay



Contents

1. Introduction

2. Training Data generation

- 2.1. Pdf to Text conversion
 - 2.1.1. Tools used
 - 2.1.2. Problem with book corpus
- 2.2. Sentencification
- 2.3. Finding entity mentions
- 2.4. Preprocessing of Knowledge Base
 - 2.4.1. Lemmatizing
 - 2.4.2. Clustering of relations
 - 2.4.2.1. Manual
 - 2.4.2.2. Word2Vec
 - 2.4.2.3. WordNet

3. Multi-R Training

- 3.1. Preprocessing
 - 3.1.1. Generate KB
 - 3.1.2. Generate Match File
- 3.2. Named entity linking
 - 3.2.1. YAGO
- 3.3. Exploring features
 - 3.3.1. Dependency parse tree
 - 3.3.2. Word Embeddings
 - 3.3.2.1. Word2Vec

4. Multi-r Testing

- 4.1. Test Data generation
 - 4.1.1. Manual
 - 4.1.2. Google Scraper
- 4.2. Results Evaluation
 - 4.2.1. Manual
 - 4.2.2. Evaluator UI

5. Information Retrieval

- 5.1. TAAT Algorithms
- 5.2. DAAT Algorithms
- 5.3. Solr-lucene API

- 6. Conclusion
- 7. Acknowledgments
- 8. References