UNIVERSITY OF BIRMINGHAM

Final Year Project

Extracting Key Phrases and Relations from Scientific Publications

Dissertation for B.Sc in Computer Science

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Acknowledgments

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Firstly, a thank you to Dr Mark Lee for being a supportive and informative supervisor, as well as an entertaining host during project meetings.

I also wish to thank my friends and family in supporting me during the year leading preceding this dissertation, ensuring I kept on track and in a good frame of mind.

1 Abstract

Abstract Here!

2 Introduction

Introduces everything... standard really.

3 Literature Review

Do the literature review here

4 Analysis and Specification

Say what I'm going to do, but probably a bad idea to have a section for this. It may work better to just have a all of the 'what im doing' in each section when we get there.

5 ScienceIE Subtask 1 - Key Phrase Extraction

A section all about what I did for part 1 (probably will be the longest section)

5.1 Method 1: Support Vector Machine

Go through making the SVM and what tests helped a lot. As part 2 has already been described, I think it makes sense here to mention I tried adapting this slightly for task 2 but that it went terribly.

5.2 Method 2: Clustering

Talk about the experimentation with clustering.

6 ScienceIE Subtask 2 - Key Phrase Classification

A section all about what I did for part 2

6.1 Word2Vec Classification

Talk about using word2vec to simply find a good way to quickly classify key phrases with decent results.

7 ScienceIE Subtask 3 - Relation Extraction

A section all about what I did for part 3

7.1 Support Vector Machine

Discuss the SVM I tried to do this with (including Word2Vec)
and hopefully more to come...

8 Creating a Service

Write about the GUI and all that went into that (probably a similar length to NLP part 1, although less (academic) references).

8.1 Introduction

Say what I want to achieve through making the GUI

8.2 Further Research

Discuss the resources used to design maybe? Make sure to include research on searching I did...

8.3 Design

Discuss design of it

8.4 Implementation

How it was pulled off

8.5 Web Interface

Exactly what was achieved

8.6 Testing

User feedback

8.7 Conclusion

Overall impact of the GUI on the project

9 Discussion

Discussion and conclusion...