

Contents

1	Introduction	2
1.1	Background	2
1.2	Motivation and objectives of system	2
1.3	What need/opportunity does the system address	2
1.4	What the system will do	2
1.5	How it will do it	2
2	Functional Description	2
2.1	Details of architecture/algorithms with citations	3
2.2	Analysis of pros and cons	3
2.2.1	For whole system	3
2.2.2	For individual components	3
2.3	Limitations of design	3
2.4	Assumptions of design	3
3	Implementation	3
3.1	How system would be implemented	3
3.2	Test effectiveness of the system	3

1 Introduction

1.1 Background

1.2 Motivation and objectives of system

1.3 What need/opportunity does the system address

1.4 What the system will do

1.5 How it will do it

2 Functional Description

Automatic Speech Recognitions (ASR)¹

Will generate imperfect index data which can be searched. This will in turn reduce the Mean Average Precision of the overall system. This might not be such a big deal if not all of the data is accurately searched, as long as we can have some keywords that are important identified. For example, if the lecturer speaks about a topic and mumbles through some of the sentences, but mentions one of our keywords, if this is recognised then it is irrelevant whether or not the rest of the sentence was heard correctly. In our case, the direct translation of the audio is not what we are trying to obtain either, just a pointer to a section that might be relevant. The user can then navigate to this section and determine if it is of relevance themselves.

Possible issues: speech variability speaker variability (accents, languages) acoustic ambiguity (lecture halls, poor microphone setups) mumbles speech or continuous speech problems context dependency (slide materials)

2.1 Details of architecture/algorithms with citations

2.2 Analysis of pros and cons

2.2.1 For whole system

2.2.2 For individual components

2.3 Limitations of design

2.4 Assumptions of design

3 Implementation

3.1 How system would be implemented

3.2 Test effectiveness of the system

Notes

¹This note is required if endnotes are enabled