Speech recognizer for North Sami

Juho Leinonen

Peter Smit*

August 4, 2015

Abstract

Speech recognizer for Sami built. N-gram tests. OOV-issues. Morphs better.

1 Introduction

Speech recognition [1]. North Sami. Under-resourced languages. (DigiSami & WikiTalk)

2 The speech recognition system

Acoustic modelling, language modelling (more next chapter), lexicon, the decoder.

- 2.1 Acoustic modelling
- 2.2 Language modelling
- 2.3 Lexicon / pronunciation dictionary
- 2.4 Decoding

3 Language modelling

n-gram, lexicon, words, morphs, morfessor.

^{*}Contact this person, not first author

- 3.1 Words
- 3.2 Morphs
- 3.2.1 Morfessor
- 4 Experiments
- 5 Results
- 6 Discussion
- 7 Conclusions
- 8 Acknowledgements

References

[1] Xuedong Huang, Alex Acero, Hsiao-Wuen Hon, and Raj Foreword By-Reddy. Spoken language processing: A guide to theory, algorithm, and system development. Prentice Hall PTR, 2001.