LONGER−LENGTH ACOUSTIC UNITS FOR CONTINUOUS SPEECH RECOGNITION (ThuAmPO1)

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Abstract :

Recent research on the TIMIT database suggests that longer−length acoustic units are better suited for modelling pronunciation variation and long−term temporal dependencies in speech than traditional phoneme−length units, yielding substantial improvements in recognition accuracy [9]. In this paper, we investigate whether similar improvements can be gained on another database, viz. excerpts from novels in a Dutch library for the blind. We use a hierarchical method that employs a mixture of word−, syllable− and phoneme−length units. Our results show that the approach does increase the word accuracy, but to a lesser extent than expected. The paper discusses possible explanations for the finding.

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