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Machine learning techniques for semantic analysis of dysarthric speech: an experimental study

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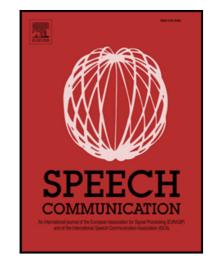
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Highlights

- A comprehensive comparative analysis of seven machine learning approaches for the task of semantic analysis of spoken input is carried out.
- Experiments were performed on two databases, one of them containing dysarthric speech.
- Speech representations are learned in an unsupervised way to accommodate for the deviation of dysarthric speech from standard pronunciation.
- Markov Logic Networks have proved to be especially robust to recognition errors caused by imprecise articulation in dysarthric speech.

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