## Il contributo dell'analisi linguistica per la classificazione automatica degli eloqui prodotti da pazienti con afasia primaria

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## **SUMMARY**

Machine Learning approaches can perform a successful classification of Primary Progressive Aphasia (PPA) main variants (Garrard et al. 2013). In this paper we show that the accuracy of these methods for all PPA sub-classifications is effective also in very sparse contexts of connected speech productions (picture description elicitation task, generating speech samples smaller than 100 tokens). This result has been obtained by including highly informative phonetic, morpho-syntactic and semantic feature information, mainly consisting of phoneme frequency, (bi)-syllabic repetition patterns, out-of-vocabulary term frequency, cues for syntactic truncated structures and characterizing low-frequency content word distribution.