Using the Web for Fast Language Model Construction in Minority Languages

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The design and construction of a language model for minority languages is a hard task. By minority language, we mean a language with small available resources, especially for the statistical learning problem. In this paper, a new methodology for fast language model construction in minority languages is proposed. It is based on the use of Web resources to collect and make efficient textual corpora. By using some filtering techniques, this methodology allows a quick and efficient construction of a language model with a small cost in term of computational and human resources. Our primary experiments have shown excellent performance of the Web language models vs newspaper language models using the proposed filtering methods on a majority language (French). Following the same way for a minority language (Vietnamese), a valuable language model was constructed in 3 month with only 15% new development to modify some filtering tools.

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