

## **Zero-shot on Low-Resource Languages by Cross-Lingual Retrieval:**

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Details:

Multilingual Pre-trained Language Models (PLMs) have been successfully applied on downstream tasks. However, the sizes of training corpus for different languages vary greatly, and therefore low-resource languages generally perform poorly on multilingual benchmarks, e.g. XNLI. Recent works on prompt-based methods significantly improve PLMs' zero-shot performance, e.g. retrieving a semantic-similar sentence as prompt helps the PLM predictions more accurate on sentence classification tasks. Thus in this thesis we would like to explore cross-lingual retrieval strategies, use for prompt-based methods to inject other prompts in other languages to improving the zero-shot capability of low-resource languages.