Machine Translation for an English-to-isiZulu Parallel Corpus

OLATOMIWA AKINLAJA 2534648

KUDZAI SIBANDA 935227

UNIVERSITY OF THE WITWATERSRAND

JOHANNESBURG,

SOUTH AFRICA

Introduction/Problem Definition

Machine translation is essential for African NLP

Language translation is a costly process, and this led to the development of automatic machine translation systems which still have not reached the level of human translators.

How can English-isiZulu translation be achieved.

Methodology & Results

Seq2Seq Model

JoeyNMT

HuggingFace

- Source: Peter Van Sant: And it means what?

- Reference: Peter Van Sant: Bese kusho ukuthini?

- Hypothesis: I-Peter Van Sant: Futhi lokhu kuyinto?

- BLEU Score: 0.508133

Conclusion & Recommendations

Seq2Seq had average results.

JoeyNMT required more data in order to achieve reliable performance.

Huggingface generated the most reliable translation.