

# Review of: "Current Trends in the Use of Machine Learning for Error Correction in Ukrainian Texts"

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**Potential competing interests:** No potential competing interests to declare.

This paper discusses the challenges and modern approaches in error correction for Ukrainian-language texts using machine learning. The challenges discussed in this paper are

- **Morphological Complexity:** Ukrainian language's rich morphology makes standard error correction models less effective.
- **Limited Research:** Few studies and tools exist for Ukrainian, unlike English.
- **Data Annotation:** Creating annotated corpora is resource-intensive due to the need for expert linguists.

The modern approaches discussed in this paper are

- **Machine Learning Models:** Exploration of various models like transformers for their potential in error correction.
- **Data Corpora:** Analysis of existing Ukrainian language corpora and the need for a larger, annotated dataset.
- **NMT and GEC:** Neural Machine Translation (NMT) and Grammar Error Correction (GEC) as promising methods for text correction.

Some of the strengths of the paper are

- **Comprehensive Analysis:** The paper provides an in-depth look at current research, tools, and data corpora relevant to GEC tasks.
- **Innovative Solutions:** It introduces the idea of developing a machine learning algorithm tailored to the Ukrainian language's specifics.

Some of the weaknesses of the paper are

- **Resource Limitation:** The scarcity of large, quality annotated datasets for Ukrainian hinders the development of effective GEC systems.
- **Model Adaptation:** Existing models are pre-trained on languages other than Ukrainian, which may not capture the unique aspects of Ukrainian morphology.

In conclusion, the paper highlights the importance of creating a specialized model for Ukrainian text error correction and the need for more research in this area. It also underscores the significance of high-quality data for training machine learning models. The paper is a call to action for further exploration and development in the field of NLP for Ukrainian.

