UniOr PET: An Online Platform for Translation Post-Editing

Antonio Castaldo[1,2], **Sheila Castilho**[3], **Joss Moorkens**[3], **Johanna Monti**[1]
[1]University of Naples "L'Orientale", [2]University of Pisa, [3]Dublin City University
antonio.castaldo@phd.unipi.it, sheila.castilho@adaptcentre.ie,
joss.moorkens@dcu.ie, jmonti@unior.it

Abstract

UniOr PET is a browser-based platform for machine translation post-editing and a modern successor to the original PET tool. It features a user-friendly interface that records detailed editing actions, including time spent, additions, and deletions. Fully compatible with PET, UniOr PET introduces two advanced timers for more precise tracking of editing time and computes widely used metrics such as hTER, BLEU, and ChrF, providing comprehensive insights into translation quality and post-editing productivity. Designed with translators and researchers in mind, UniOr PET combines the strengths of its predecessor with enhanced functionality for efficient and user-friendly post-editing projects.

1 Introduction

The emergence of machine translation (MT) technologies has reshaped the translation industry, with post-editing becoming a critical task for translation productivity. Post-editing tools, however, often fail to meet the practical needs of translation researchers. UniOr PET addresses this gap by offering a browser-based platform optimized for simplicity while guaranteeing accurate data collection.

We release UniOr PET as an open-source tool, under the MIT License, encouraging collaboration and further development by the translation and research communities. Developers and researchers are invited to contribute enhancements, report issues, and propose new features, ensuring that UniOr PET evolves alongside the needs of its users. UniOr PET is designed with a strong focus on user privacy. Data is collected in compliance with GDPR standards and encrypted to safeguard sensitive information.

2 Product Description

UniOr PET is a lightweight, web-based tool that eliminates the need for users to download or install software. This feature directly addresses concerns raised by research participants about the inconvenience of downloading external applications. The platform features detailed tracking of editing activities, such as additions, deletions, and segment-level editing times. The tool is designed for scalability, as it provides automatic progress saving and a flexible interface for revisiting previously edited segments at any given time. The interface offers flexibility, with small or large editing areas, and a configurable editing layout that may be both vertical or side-by-side, displaying the source text, the MT output, and an editable field for the post-edited translation, as displayed in Figure 1.

UniOr PET also includes a dedicated management dashboard for project managers. This dashboard allows managers to oversee the entire post-editing workflow by tracking translator progress and comparing different post-editing outputs. The dashboard provides summary statistics, progress charts, and detailed comparisons of editing and quality metrics.

Recognizing the importance of context in translation post-editing and evaluation (Nelson Jr., 1989; House, 2006; Castilho and Knowles, 2024), UniOr PET allows translators to view a configurable number of preceding and following segments alongside the current one. This ensures consistency in tone, style, and narrative flow, which is essential when translating richly detailed texts such as literature. Real-time analytics are integrated into the management dashboard to enable assessment of post-editing productivity and effort.

The platform is designed to be an update to the already established PET Tool (Aziz et al., 2012), ensuring that the collected data, including editing times, are directly comparable between the two platforms. This compatibility allows researchers to leverage existing datasets and compare results across both tools seamlessly, making UniOr PET a valuable tool for academic and, potentially, professional use.

Proceedings of Machine Translation Summit XX Volume 2, pages 86–88, June 23-27, 2025

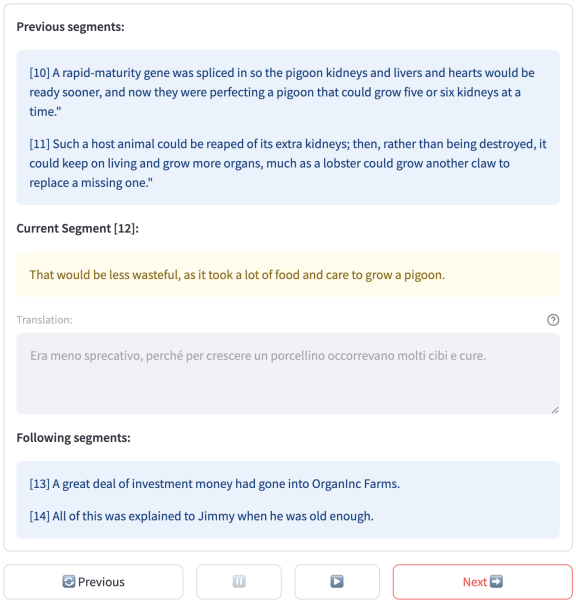

Figure 1: UniOr PET user interface, featuring PET Timer and contextual segments.

3 Data Collection

UniOr PET collects detailed interaction data during the post-editing process. This data includes information on editing actions, such as insertions, deletions, and substitutions. It also records time spent on each segment and on the overall task. Additionally, translation metadata, such as segment length and the source of the MT, is collected.

The platform includes two timers for tracking editing time, each tailored to different user needs. The first is a modern timer that begins recording automatically as soon as a segment is displayed and stops when the user moves to the next segment. This timer incorporates an idle time detection feature triggered after 30 seconds of inactivity, ensuring that only active editing time is logged, even if the translator steps away from the task. The second timer, known as the PET Timer, mirrors the functionality of the PET Tool. It offers a more traditional, manual approach to time tracking, giving translators precise control over when editing time is recorded to accommodate specific project requirements.

UniOr PET also computes hTER (Snover et al., 2006), BLEU (Papineni et al., 2002), and ChrF (Popović, 2015) scores, using the post-edited translation as the reference and the initial MT output as the hypothesis. This helps researchers assess the effectiveness of the MT models used for the initial translations.

4 Conclusion

UniOr PET is a newcomer post-editing tool, offering a streamlined browser-based platform designed to meet the needs of translators and researchers. By building on the foundation of the established PET tool, UniOr PET ensures data compatibility and comparability, while introducing contemporary features such as automated editing time tracking with idle time detection and integrated quality metrics in a browser-based, server-hosted user interface.

Acknowledgments

Part of this work has been funded by the National PhD programme in Artificial Intelligence, through a doctoral grant No. I51J23000540007. The second and third authors benefit from being members of the ADAPT SFI Research Centre at Dublin City University, funded by the Science Foundation Ireland under Grant Agreement No. 13/RC/2106_P2.

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