

Module: Machine Translation Quality Assessment

Lecturer: João Lucas Cavalheiro Camargo **Instructions - Lab 4 - Ethics in Evaluation**

- This is a case study of a company that is reporting the release of their new MT system.
- Consider anything that may be methodologically a problem or largely hyperbolic.
- With your group, highlight and discuss what in the brief you would question. Do not forget to include your own suggestions on how to improve it!
- At the end, present the report and describe what your group agreed as questionable and report your suggestions.

System Name: OmniTranslate LLM

Content Type: Multilingual Texts Across Various Domains

Domain: General

Human Evaluation Metrics Used: Fluency, Adequacy

Automated Metrics Used: BLEU, METEOR, COMET

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Press Release: OmniTranslate LLM Sets New Standards in Machine Translation

September 23, 2024

We are thrilled to announce the launch of **OmniTranslate LLM**, a groundbreaking large language model that delivers unparalleled translation capabilities across multiple languages and domains. Designed to break down language barriers, OmniTranslate LLM provides users with fluent and accurate translations, facilitating seamless global communication like never before.

In our extensive evaluations, OmniTranslate LLM has achieved exceptional scores on leading automated metrics, including BLEU, METEOR, and COMET. Using these traditional metrics are just as effective for our LLM. These impressive results underscore the model's ability to produce translations that closely mirror human quality in both fluency and adequacy.



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Professional linguists conducted human evaluations focusing on fluency and adequacy, confirming that OmniTranslate LLM consistently delivers translations that are natural and faithful to the source text. This ensures that users receive translations that not only read well but also accurately convey the original meaning.

While OmniTranslate LLM is capable of performing a wide range of natural language processing tasks, its primary focus is on delivering top-tier translation services. Users can rely on its advanced capabilities to handle texts from various domains, including technical documents, literature, and everyday communications.

An important aspect of OmniTranslate LLM is its commitment to environmental sustainability. Traditional training methods for large language models can consume vast amounts of energy, often equating to several days of a country's total energy usage. OmniTranslate LLM sets a new standard by significantly reducing this impact. Instead of taking three days' worth of Ireland's total energy consumption to train, it only requires one day's worth of electricity. This reduction not only lowers operational costs but also minimizes the environmental footprint.

Furthermore, OmniTranslate LLM employs innovative cooling techniques that use less water compared to conventional methods. By optimizing our data centers for energy efficiency and reducing water usage, we are taking proactive steps toward a more sustainable future.

Despite these advancements, we acknowledge that training large models still involves considerable energy consumption and carbon emissions. The carbon footprint of training OmniTranslate LLM is equivalent to that of thousands of transatlantic flights. We are actively exploring renewable energy sources and carbon offset programs to mitigate this impact and are committed to continual improvement in this area.

OmniTranslate LLM represents a significant leap forward in machine translation technology. We believe it will become an indispensable tool for businesses, educators, and individuals seeking high-quality translations. We invite you to experience the exceptional capabilities of OmniTranslate LLM and join us in our journey toward more sustainable AI solutions.



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For more information or to request access, please visit our website or contact our sales team.

