

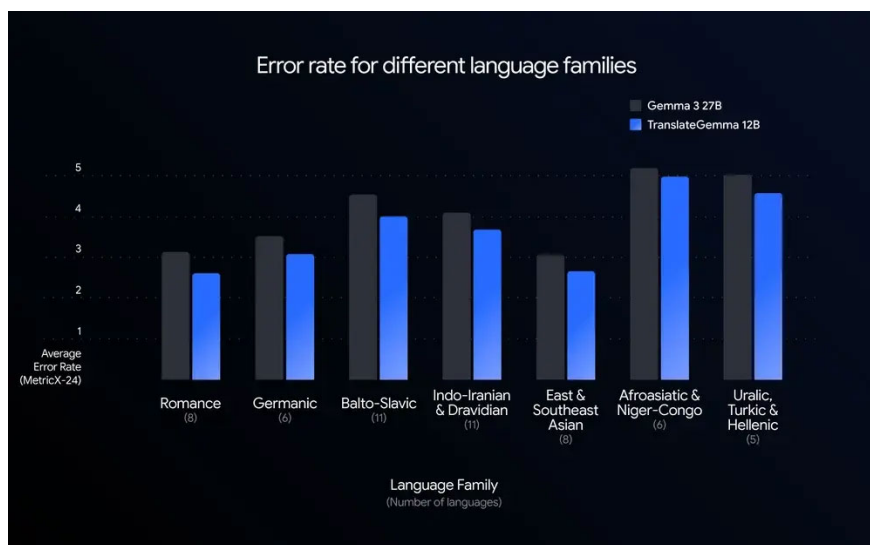
Google launches TranslateGemma – a new open-source translation model with many advantages.

TranslateGemma is Google's new translation model suite, supporting 55 languages, offering high performance, and is an evolution of Gemma 3.

Google has just announced a new set of open-source translation models, developed based on Gemma 3 – the company's open-weight model. Google calls this a "major leap forward in open-source translation." The new model, called TranslateGemma, supports up to 55 languages, including popular languages ??such as Spanish, French, Chinese, and Hindi.

Notably, this announcement came just hours after OpenAI launched ChatGPT Translate. While ChatGPT Translate focuses on contextual and tone-based translation, rather than word-for-word translation, TranslateGemma is more geared towards performance, accuracy, and flexible deployment for developers.

TranslateGemma currently has three versions with different parameter scales: 4B, 12B, and 27B. According to Google, the 12B model even outperforms the original Gemma 3 27B when evaluated using the WMT24++ benchmark. For developers, achieving high performance from a model with less than half the number of parameters means better processing speed, lower latency, while maintaining accuracy.



Google says the 4B version is optimized for mobile device inference, while the 12B version is suitable for mainstream laptops. The 27B model, however, requires more powerful hardware, such as a cloud-based NVIDIA H100 GPU.

In tests using the Vistra benchmark for image text translation, TranslateGemma delivered impressive results. Although not specifically optimized for image translation, the model demonstrated better text translation capabilities than many competitors.

Google also shared that this efficiency comes from a special two-stage training process. In the first stage, the company uses Supervised Fine-Tuning, training Gemma 3 models on human-generated translation data, combined with high-quality aggregated data generated by Gemini models.

Next comes the Reinforcement Learning phase, where Google uses various reward models, along with advanced metrics like MetricX-QE and AutoMQM, to guide the model toward more natural and contextually accurate translations.

Currently, the TranslateGemma models are publicly available on Kaggle and Hugging Face, allowing anyone to download, test, or develop translation applications based on these platforms.

You finished reading the article "**Google launches TranslateGemma – a new open-source translation model with many advantages.**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.