



We are



MLEAFIT

Main contributors

Daniel Cano

Jero98772 (me)

Juan esteban Castro

Juan Jose moreno



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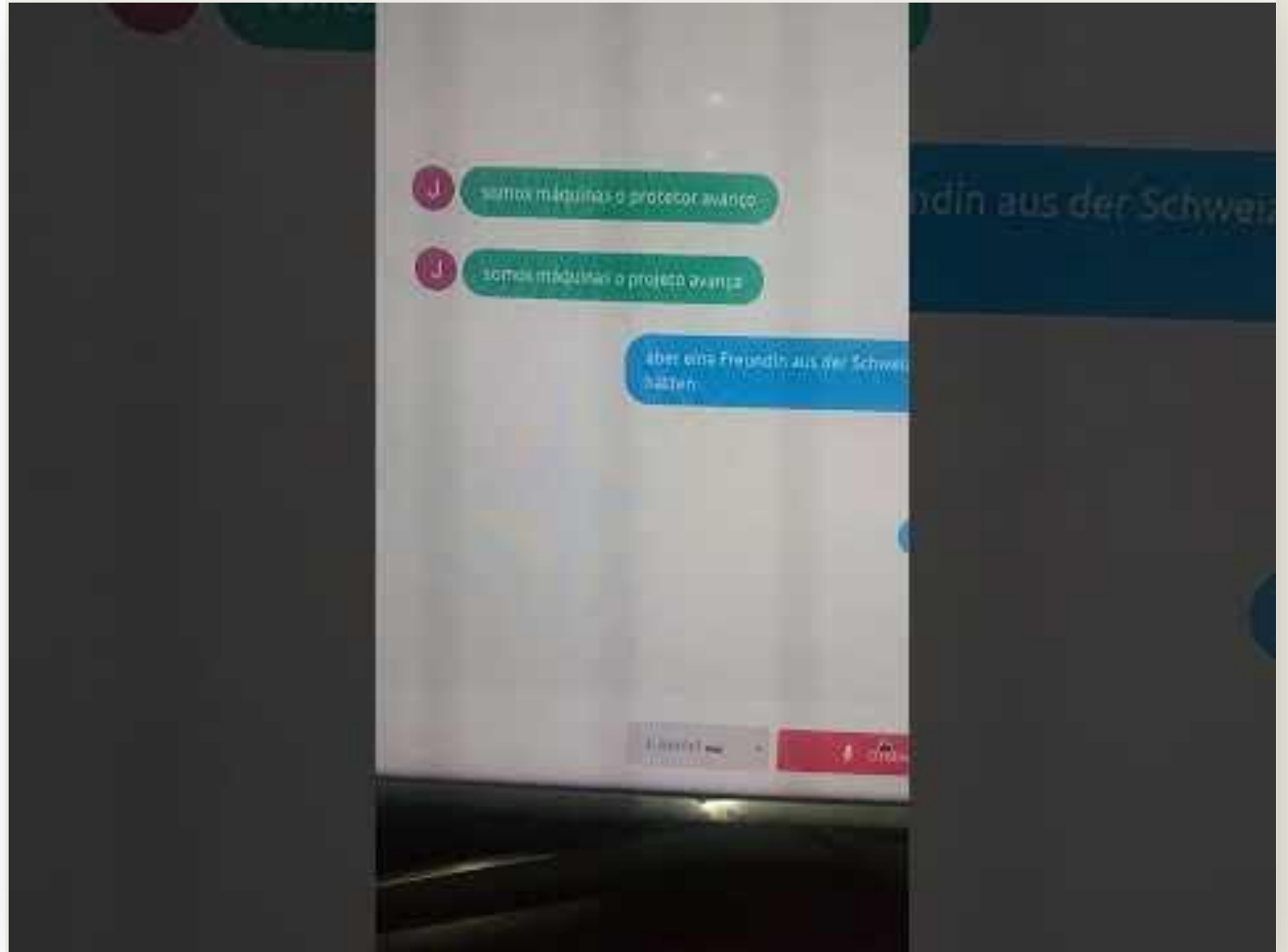
- What is Glovoz
- Architecture
- How is made
- Machine learning
- Applications of Glovoz
- Conclucions

What is Glovoz?

- Glovoz: Multilingual voice-to-voice Multi-translator system break language barriers for seamless global communication in today's interconnected world.



Test Glovoz

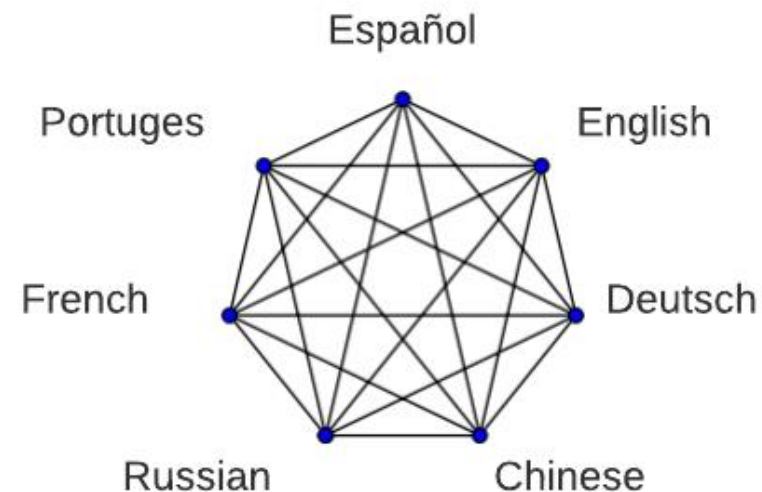


What is Multi-translation

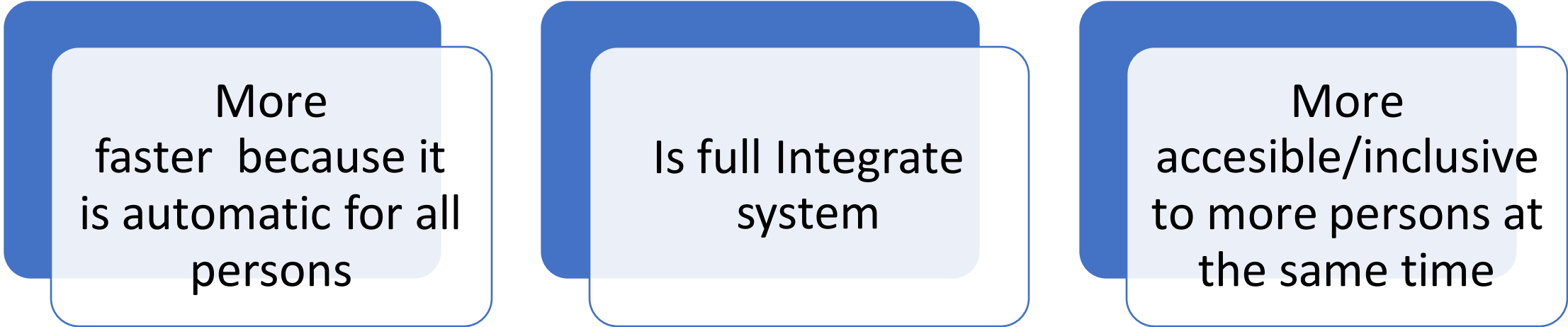
Translation

Portuges \longleftrightarrow Spanish

Multi-translation



Why is better to normal translations systems?

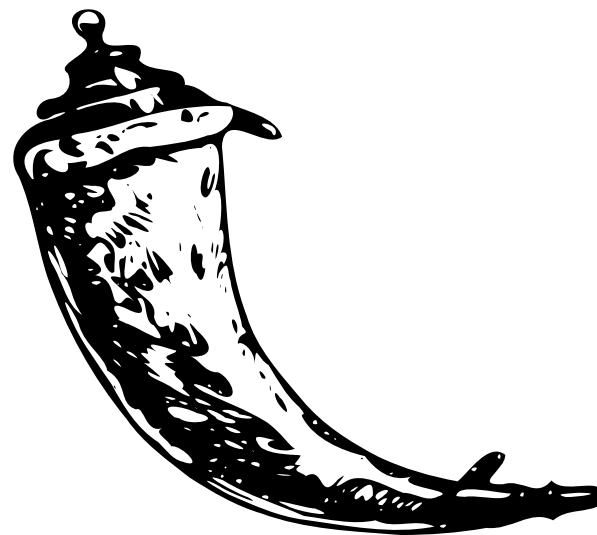
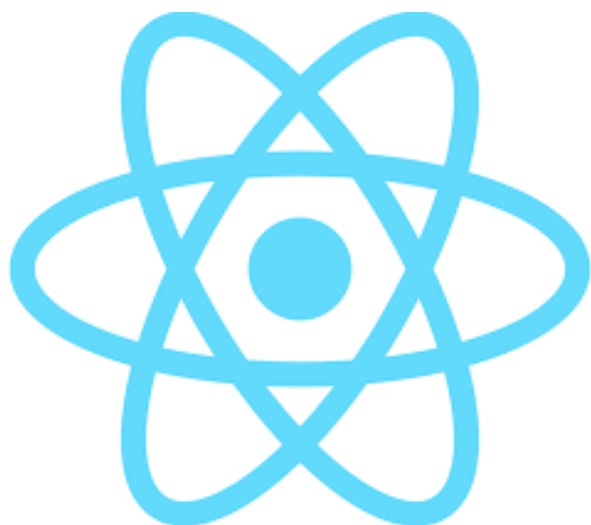


More
faster because it
is automatic for all
persons

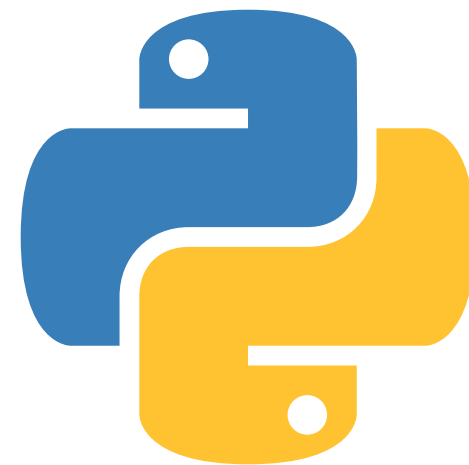
Is full Integrate
system

More
accessible/inclusive
to more persons at
the same time

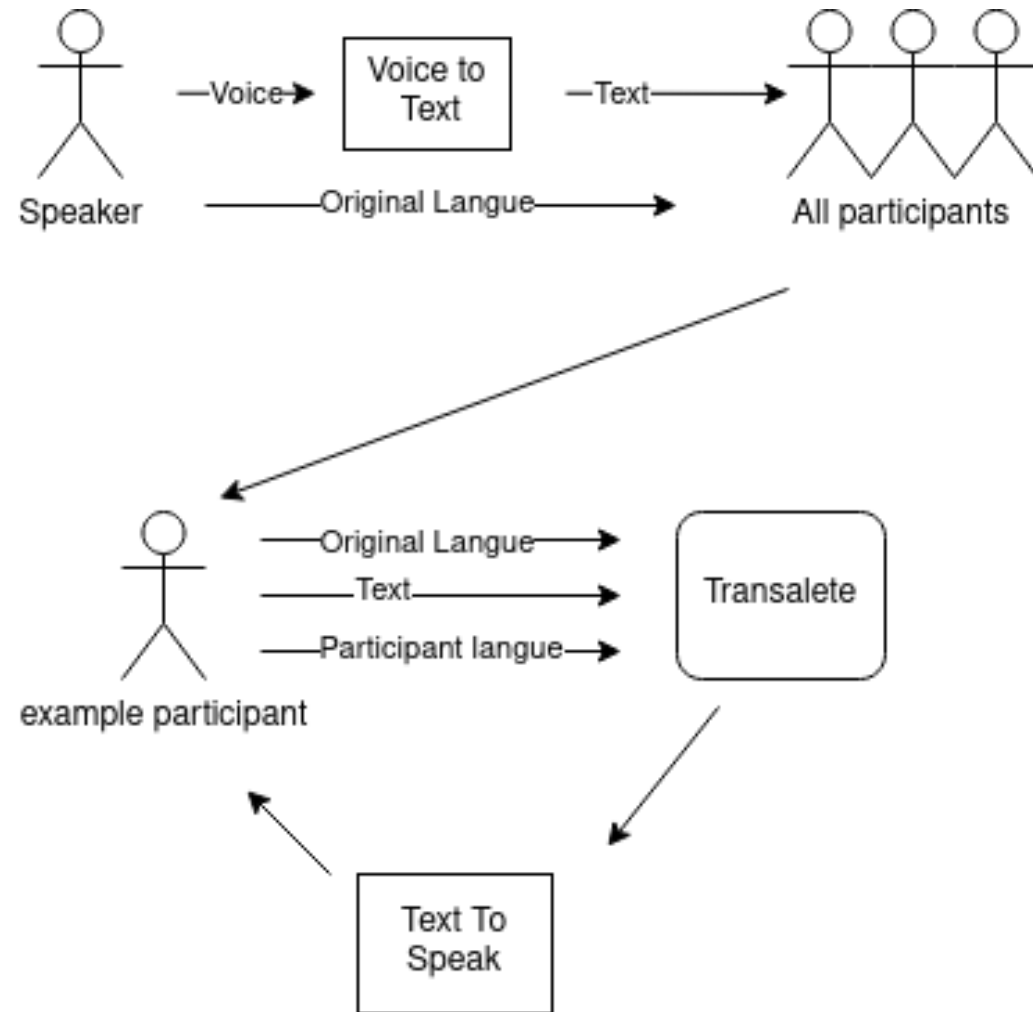
Frameworks that we use in Glovoz



Flask



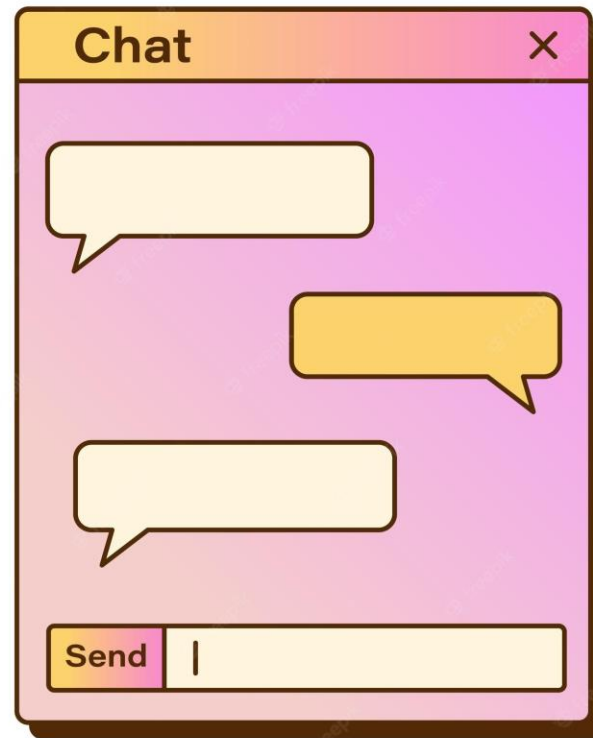
Aplication Pipeline



Architecture

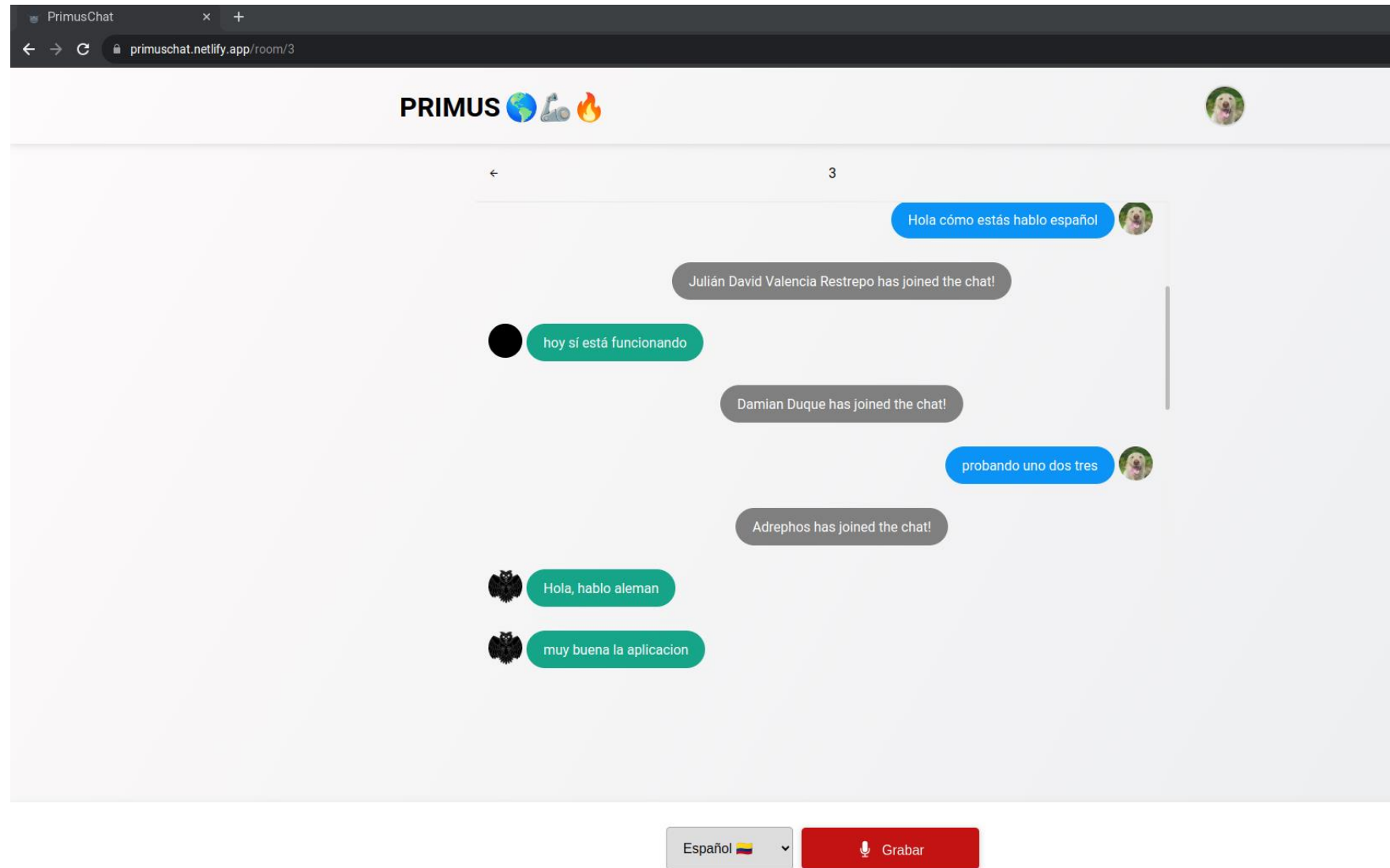
Why is designed like a chat:

- Scalability
- Middleware
- Real-Time Interaction
- Efficiency
- Message Flow



Frontend

- **User-Friendly Interface**
- **Real-Time Interaction**
- **Accessibility**



Backend

- Recive data
- Translate
- Send it again



Why we need machine
learning for
translate

Why dont use API 's?



Being
an accurate
translation
service

Being so
broken
Shakespeare
would be jealous.

Today

But why transformers?

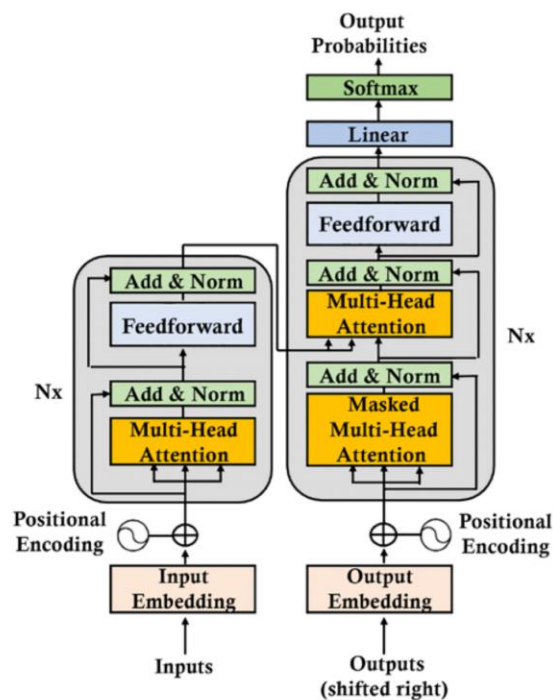
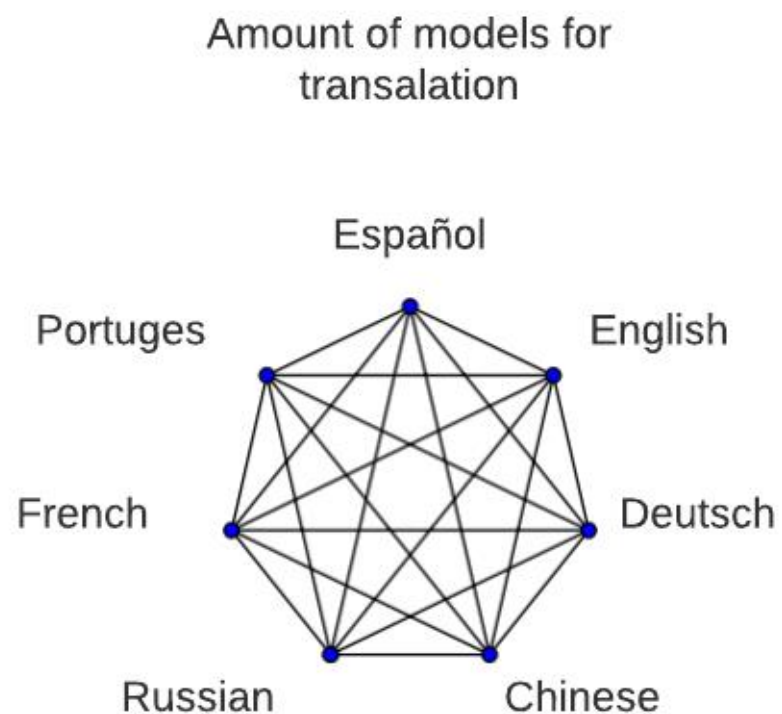


Table 2: The Transformer achieves better BLEU scores than previous state-of-the-art models on the English-to-German and English-to-French newstest2014 tests at a fraction of the training cost.

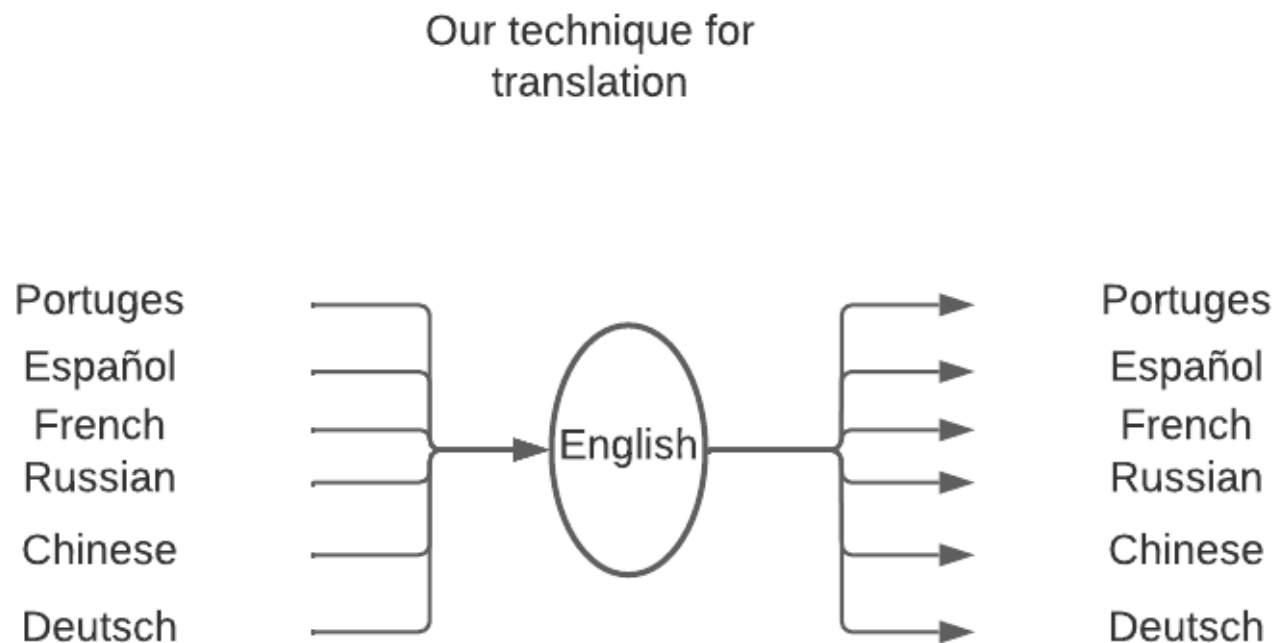
Model	BLEU		Training Cost (FLOPs)	
	EN-DE	EN-FR	EN-DE	EN-FR
ByteNet [18]	23.75			
Deep-Att + PosUnk [39]		39.2		$1.0 \cdot 10^{20}$
GNMT + RL [38]	24.6	39.92	$2.3 \cdot 10^{19}$	$1.4 \cdot 10^{20}$
ConvS2S [9]	25.16	40.46	$9.6 \cdot 10^{18}$	$1.5 \cdot 10^{20}$
MoE [32]	26.03	40.56	$2.0 \cdot 10^{19}$	$1.2 \cdot 10^{20}$
Deep-Att + PosUnk Ensemble [39]		40.4		$8.0 \cdot 10^{20}$
GNMT + RL Ensemble [38]	26.30	41.16	$1.8 \cdot 10^{20}$	$1.1 \cdot 10^{21}$
ConvS2S Ensemble [9]	26.36	41.29	$7.7 \cdot 10^{19}$	$1.2 \cdot 10^{21}$
Transformer (base model)	27.3	38.1	$3.3 \cdot 10^{18}$	
Transformer (big)	28.4	41.8	$2.3 \cdot 10^{19}$	

Models complexity $2K(K-1)$



$K_1: 0$	$K_2: 2$	$K_3: 6$	$K_4: 12$
$K_5: 20$	$K_6: 30$	$K_7: 42$	$K_8: 56$
$K_9: 72$	$K_{10}: 90$	$K_{11}: 110$	$K_{12}: 132$

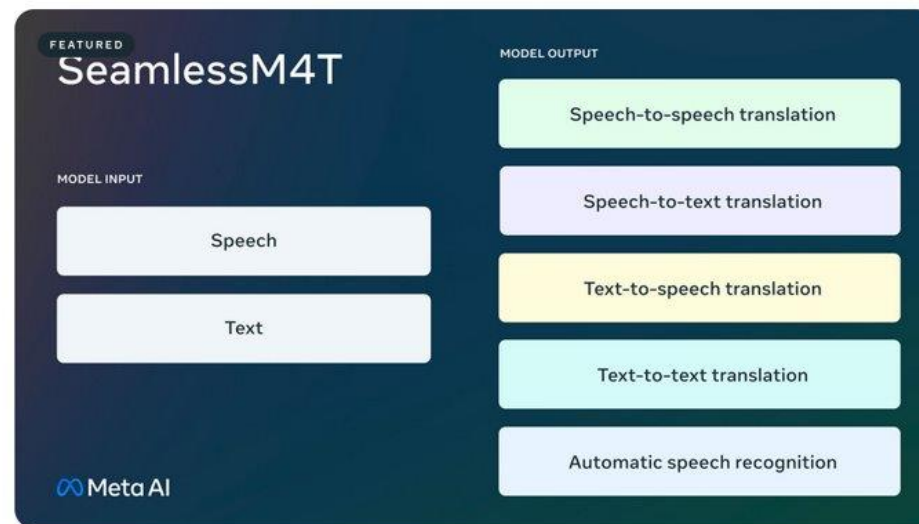
How we can reduce the amount of models 2K



Tomorrow

SeamlessM4t change all

The latest from Meta AI



Natural Language Processing

Bringing the world closer together with a foundational multimodal model for speech translation

SeamlessM4T provides high-quality translation, allowing people from different linguistic communities to communicate effortlessly through speech and text.

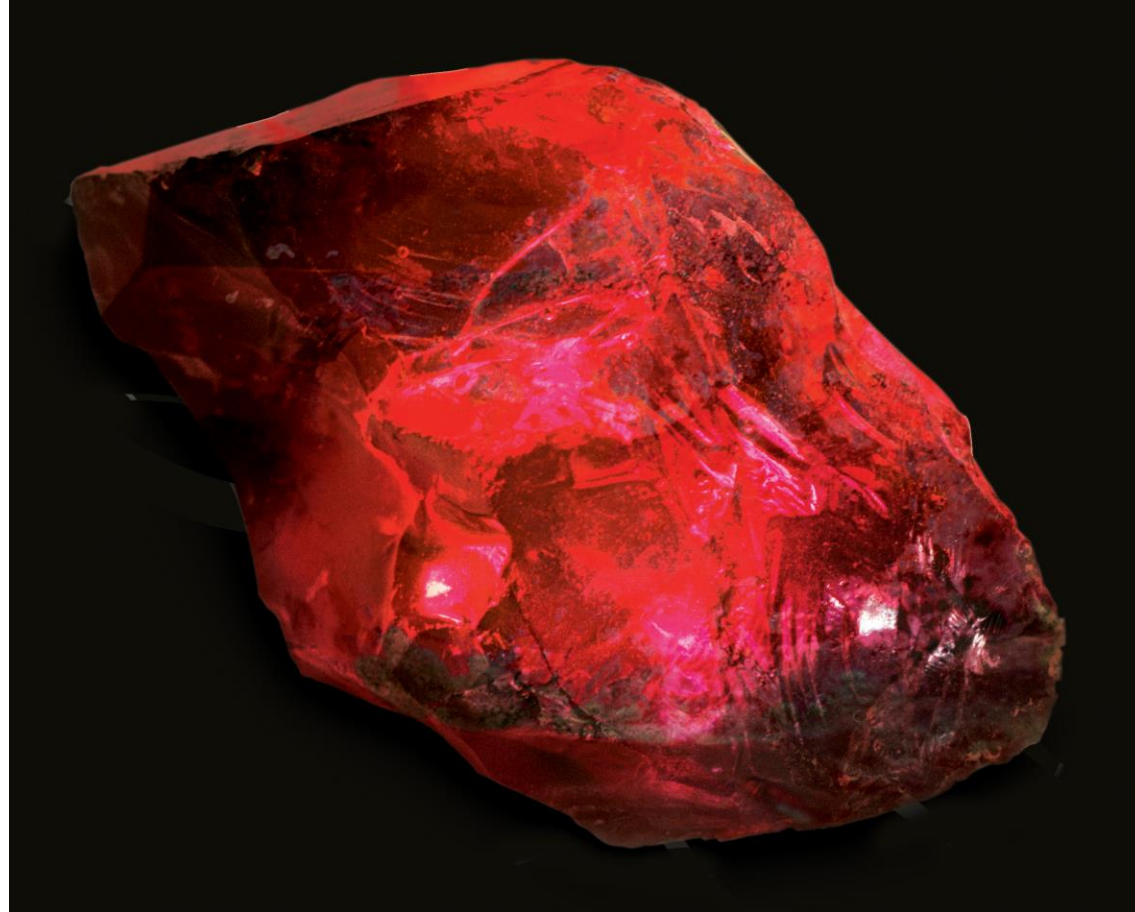
August 22, 2023

Applications NEVER ENDS!!!



- Diplomatic Meetings and Summits
- Business Conferences and Trade Shows
- Multinational Corporations meetings
- International Conferences and Symposia
- Entertainment and Media
- International Sporting Events
- Emergency Response and Humanitarian Aid
- International Court Cases
- Academic and Educational Exchange Programs

Conclusions



Thanks, we going continue working
at Glovoz



<https://github.com/Semillero-Inteligencia-Artificial-EAFIT/Glovoz>