

What is SeamlessM4T?

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About SeamlessM4T

- SeamlessM4T, which stands for **Massively Multilingual and Multimodal Machine Translation**, is an advanced **multilingual multimodal AI translation and transcription model**.
- It was **developed by Meta**, the technology company formerly known as Facebook.
- SeamlessM4T is **capable of performing** various tasks including **speech-to-text, speech-to-speech, text-to-speech, and text-to-text translations**.
- **SeamlessM4T supports:**
 - **Speech recognition for nearly 100 languages;**
 - **Speech-to-text translation** for nearly **100 input and output languages;**
 - **Speech-to-speech translation**, supporting nearly **100 input languages and 36** (including English) **output languages;**
 - **Text-to-text translation for nearly 100 languages;**
 - **Text-to-speech translation**, supporting nearly **100 input languages and 35** (including English) **output languages;**
- **Other Features:**

- SeamlessM4T **brings together diverse spoken data sources to provide a comprehensive multilingual** and multimodal translation **experience from a single model**.
 - It **performs the entire translation task in one go**, unlike other large translation models that divide translation across different systems.
 - It has the **ability to recognize when a speaker is code-switching or when someone moves between two or more languages** in one sentence.
 - It also **recognizes gender bias in languages** and said the model can quantify gender bias in translations.
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Q1) What is Artificial Intelligence?

Artificial Intelligence (AI) refers to the simulation of human intelligence in machines, particularly computer systems. It involves the development of computer programs and algorithms that enable machines to perform tasks that typically require human intelligence, such as understanding natural language, recognizing patterns, solving problems, and making decisions.

Source: [Meta launches multilingual AI translation model for 100 languages](#)

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