

Made by: Simran and Jezreel

Our project is on Machine translation which is the process of a computer software automatically translating content from one language to another without any human input.

An advantage to machine translation is that it can translate text which is in any language so there is no such major concern while a professional translator specializes in one field.

- What is the problem?

I think that communication is one of the biggest problems and translating some languages using machine learning would make it easier to communicate with people from different places.

- Why should people buy or listen to the app/idea?

People should buy the app so when they move around to different places and don't know the local language, they can use the app for translating. The reason why the should buy our translator app instead of others is that it is free, accurate and precise in vocabulary.

- How will this benefit the AI community?

The reality is that AI still has problems processing requests in one language, so with translation it is made easier. Translation is also beneficial as it supports human translators and simplifies the process.

- These are some examples of datasets that can be used for Machine translation:

The Machine Translation of Noisy Text (MTNT), Neural machine translation (NMT), Statistical machine translation (SMT), Europarl.

We could use NMT to make the translation a better quality as it is new reliable and a modified version of SMT.

What is a MT5?

The mt5 covers 101 languages and is a variant of a T5. The T5 is a Text-to-Text Transfer Transformer which unifies a text-to-text format and scale to attain state-of-the-art results on a wide variety of English-language NLP tasks. The mt5 is a massively multilingual pre-trained text-to-text transformer that was pre trained on a mc4 and needs to be fine-tuned before it is useable on a downstream task.

These are our reference links:

https://www.kaggle.com/datasets/dhruvildave/en-fr-translation-dataset?resource=download

https://www.tcworld.info/e-magazine/translation-and-localization/neural-machine-translation-explained-

<u>1167/#:~:text=Neural%20networks%20for%20machine%20translation%20Building%20your%20own,Step%205%3A%20Install%20tools%20for%20pre-processing%20and%20evaluation</u>

https://medium.com/analytics-vidhya/english-to-french-machine-translation-system-in-python-a69b7b34fc0

