SG TRANSLATE

## Efficient translation engine for local communications

Challenge

Machine translation services usually fail in accurately translating context-specific terms like street names and abbreviations of government organisations. On the other hand, human translators may not be sufficiently efficient for real-time translations.

With Singapore being a hub for diverse cultures and languages, the challenge also lies in developing a translation tool for fast and consistent translations of government communications from English to the country's

Our Solution

To solve this problem, A*STAR's Institute for Infocomm Research (I²R) partnered with the Ministry of Communications and Information (MCI) to develop a specialised translation tool. Called SGTranslate, the translation engine is powered by artificial intelligence algorithms, which analyse and learn from input data to produce accurate translations between languages.

Techniques used include different types of data augmentation methods to increase the pool of data for engine training as well as biasing model training towards local content, ensuring engine would be sensitive towards localised terms such as the names of government organisations, places of interest, landmarks and road names in Singapore. The system is also capable of updating new terminologies and model when new data becomes available.

A collaboration between:

Ministry of Communications and Information

Institute for Infocomm Research A*STAR
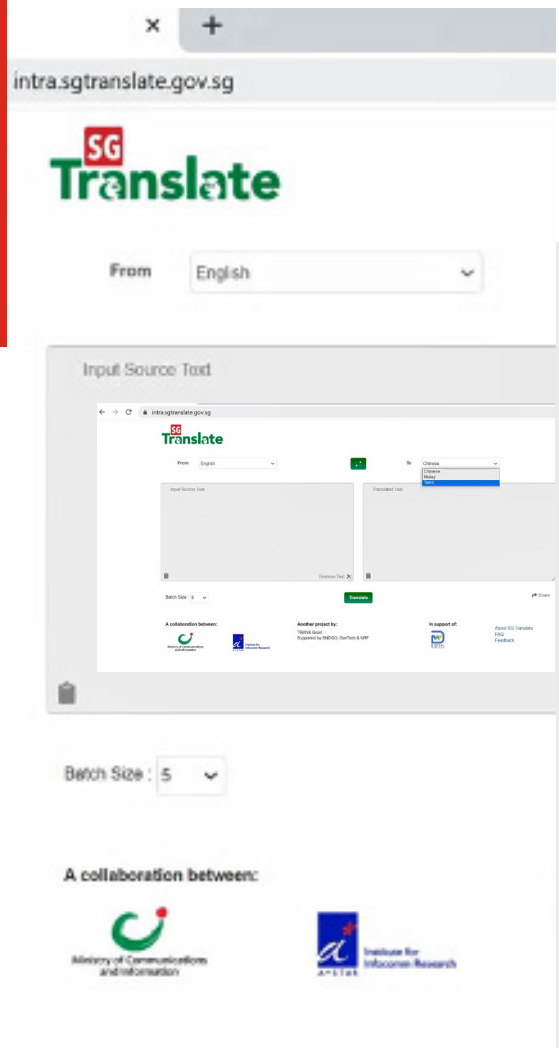
Summary

Accurately recognises and conveys terms specific to local context, especially in government communications

Efficient and trainable programme produces minimal, easy-to-correct errors

Potential Applications

Use by government and organisations to send timely, comprehensible communications

Agency for Science, Technology and Research

SINGAPORE

FUSIONWORLD