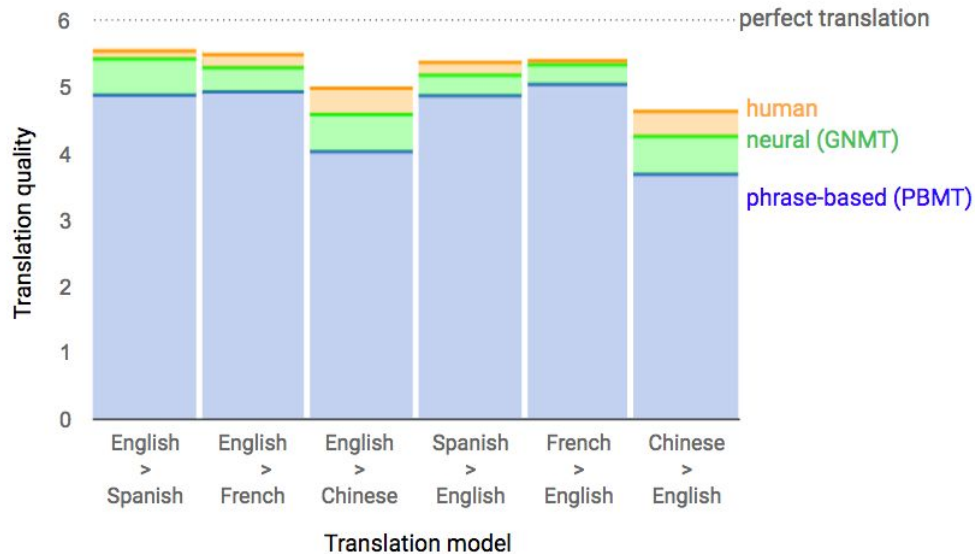


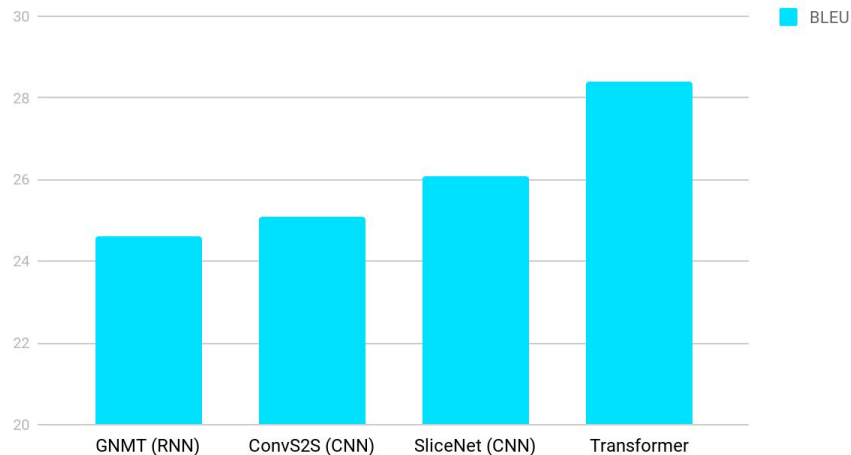
Has NMT really bridged the gap between MT and human translation?

Ivan Makhotin, Yury Mokriy, Ekaterina Goltsova, Anna Medvedeva, Nikita Kiselev

Current situation



English German Translation quality



Attempts to solve the challenges

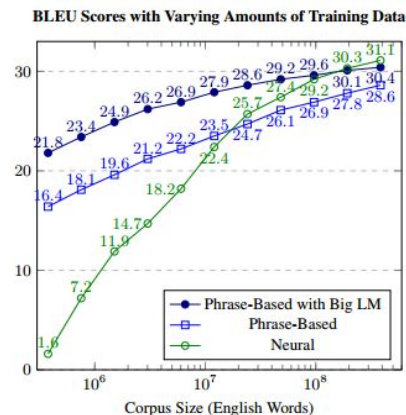
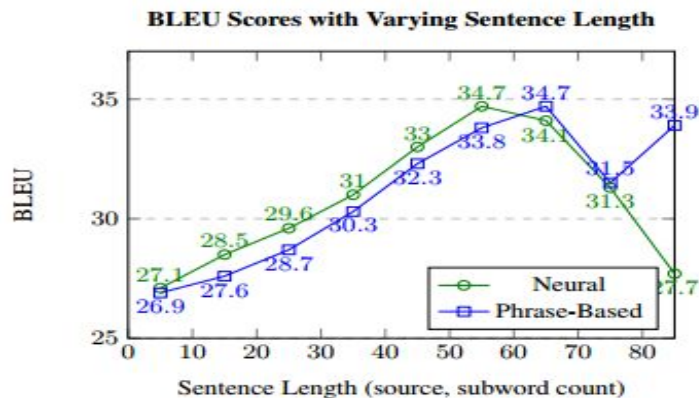
1. Rare words, out of domain

GNMT:
divide words into a limited set of
common sub-word units

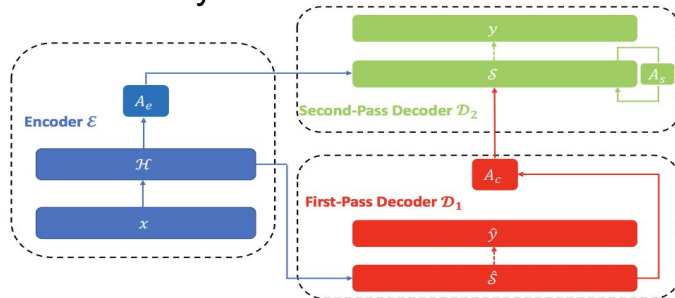
2. Amount of training data

Semi-supervised
approach

3. Long sentences



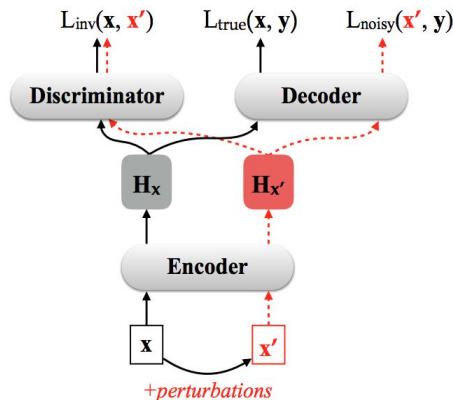
Achieving Human Parity on Automatic Chinese to English News Translation



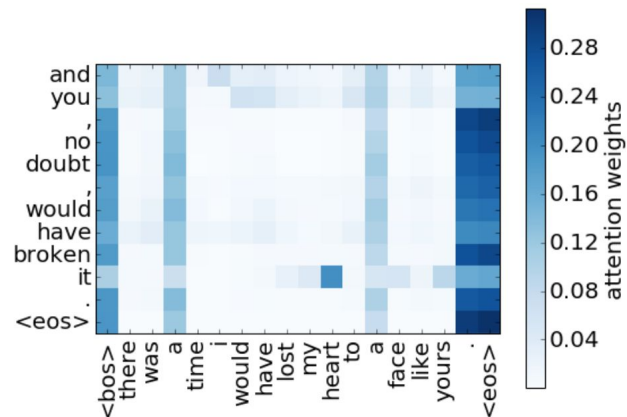
5. Beam search

Towards Robust Neural Machine Translation

6. Robustness



7. Anaphora resolution



Context-Aware Neural Machine Translation Learns Anaphora Resolution

- There was some wheel. It was beautiful. it -> oho.
- There was some car. It was beautiful. it -> oha.

Thank you for your attention

Extra slides

Context-Aware Neural Machine Translation Learns Anaphora Resolution

Solving the problem

There was some wheel. It was beautiful. it -> оно.

There was some car. It was beautiful. it -> она.

