Twitter Crowd Translation

Eduard Šubert
Faculty of Nuclear Sciences and Physical Engineering
Czech Technical University in Prague
Ondřej Bojar
Institute of Formal and Applied Linguistics
Faculty of Mathematics and Physics
Charles University, Prague, Czech Republic

November 16, 2014



Twitter Usage

284 million monthly active users

500 million Tweets are sent per day

80% of Twitter active users are on mobile

https://about.twitter.com/company

Twitter Usage

Twitter supports 35+ languages

https://about.twitter.com/company

Goals

- ► provide translations of tweets
- accurate
- ► fast (aiming at "instant")
- ► stay within the Twitter platform

Machine Translated Tweet

@Philae2014:

Some problems with my cold gas thruster could mean that it might be up to harpoons & ice screws to make sure I stay on $\#67P\ \#CometLanding$

některé problémy se zimou plynových trysek by mohlo znamenat, že by to mohlo být až harpuny & mnaga; led šrouby, aby se ujistil, že zůstane na 67 P # # cometlanding

some problems with cold gas jets could it be to harpoon & mnaga; ice screws to assure that stays on 67 p # # cometlanding

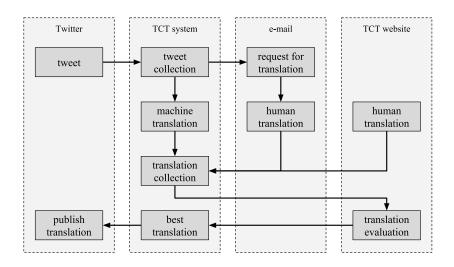
Goals

- collect appropriate parallel corpus
- provide translations of tweets
- accurate
- ▶ fast (aiming at "instant")
- ► stay within the Twitter platform

TCT - Twitter Crowd Translation

- human translation of tweets
- scoring of translations
- ► autonomous tweet collection and publishing

TCT Workflow



Tweet Example



tct retweeted

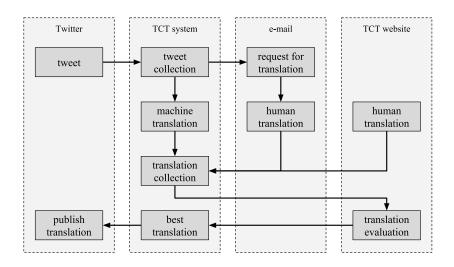


Practical overview of EU financial help to #Ukraine - how much we provide, for what & under what conditions; read here: bit.ly/1utqdbf



13 37 🛊 10

TCT Workflow



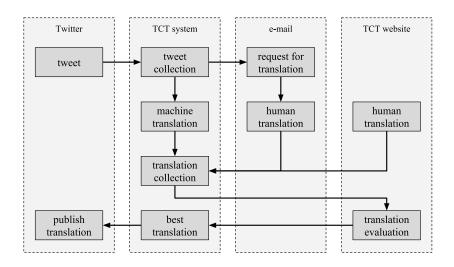
E-mail Example

Please translate the following post to language: Czech

Practical overview of EU financial help to #Ukraine - how much we provide, for what & under what conditions; read here: bit.ly/1utqdbf

ID:51d46e56c720c0a20e98e7e628b5806a

TCT Workflow



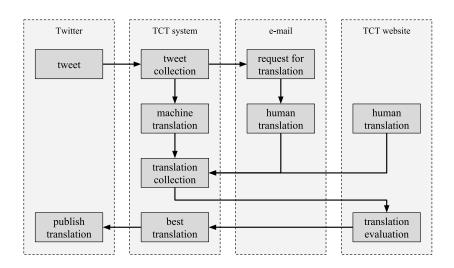
Translation Evaluation

Practical overview of EU financial help to #Ukraine - how much we provide, for what & under what conditions; read here: bit.ly/1utqdbf

Praktický přehled finanční pomoci EU Ukrajině. Kolik poskytujeme, za co a za jakých podmínek. Čtete zde

hate it	dislike it	it's OK	like it	love it
		Skip		

TCT Workflow



Best Translation

tct @tctranslation · Sep 27

.@StefanFuleEU Praktický přehled finanční pomoci EU Ukrajině. Kolik poskytujeme, za co a za jakých podmínek. Čtete zde http://t.co/ZHHOwJrL...







View conversation





Stefan Füle @StefanFuleEU · Sep 26

Practical overview of EU financial help to #Ukraine - how much we provide, for what & under what conditions; read here: bit.ly/1utqdbf









Tweet Translation

- context
- abbreviation

Terrorists used #Russian-supplied Smerch MRLs against #Ukaine forces in th conflict zone http://t.co/s9ZKP2zsVk EMPR http://t.co/9ElqFP7qlg

Mykolaiv armored plant handed over 10 APCS to the border guards http://t.co/ANOtAKcUdw via @HromadskeTV http://t.co/mUmfbYKuwf

Terrorists used #Russian-supplied Smerch MRLs against #Ukaine forces in th conflict zone http://t.co/s9ZKP2zsVk EMPR http://t.co/9ElqFP7qlg

Mykolaiv armored plant handed over 10 **APC**S to the border guards http://t.co/ANOtAKcUdw via @HromadskeTV http://t.co/mUmfbYKuwf

 $\begin{aligned} \mathsf{MRLs} &= \mathsf{multiple} \ \mathsf{rocket} \ \mathsf{launcher} \\ \mathsf{APC} &= \mathsf{armoured} \ \mathsf{personnel} \ \mathsf{carrier} \end{aligned}$

Russian SOF in Ukraine with "Polite People" patch and new gear #CrisisUcrania http://t.co/gqLvuehCof

Russian SOF in Ukraine with "Polite People" **patch** and new **gear** #CrisisUcrania http://t.co/gqLvuehCof





Terrorists used #Russian-supplied Smerch MRLs against #Ukaine forces in th conflict zone http://t.co/s9ZKP2zsVk EMPR http://t.co/9ElqFP7qlg

Mykolaiv armored plant handed over 10 APCS to the border guards http://t.co/ANOtAKcUdw via @HromadskeTV http://t.co/mUmfbYKuwf

Summary

- human translation of tweets
- translation evaluation
- parallel corpus
- understanding of tweet structure