## WIPO Translate updates

ATAC: Advanced Technology Applications Center

Bruno Pouliquen
Head,
Advanced Technology Application Center,
World Intellectual Property Organization (WIPO)

# Summary of WIPO Al-based Tools and **Applications**

AI="Deep supervised machine learning"

### Text processing:

- WIPO Translate (Neural Machine Translation)
- Classification &

### **Image similarity processing:**

- Image classification (logos)
- Image-based search

### **Speech processing:**

- Speech to text
- Search in video-audio
- Speech to translated text\*

**Disclaimer:** Any machine translation or speech processing tool, including WIPO's, is NOT designed to replace the need for human intervention – It is just a "tool", to aid humans in making their intervention more effective and

\* In development

efficient

#### Team: ATAC



Christophe (MT/Image)



Michal (MT/NLP)



Fellow(MT/NLP)



Daniel (MT)

Advanced Technology **Applications** Center

Aim: Explore machine learning techniques in IP



Bruno (MT/WipoLex)



Claudio (business/partnerships)



Ivo (Image)



Akshat (Speech)



Huseini (speech)

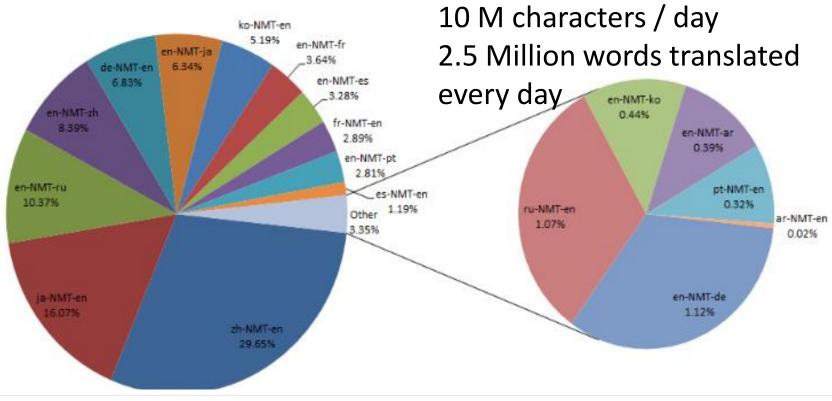


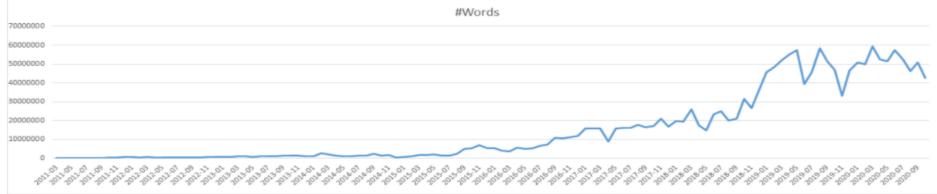
[interns] Ha/Laurie/Maxence/denis (translated speech/ Chatbots/classification/CV screening)

### What's new in WIPO Translate?

- Machine translation of ISR/WOSA
   Specific models to be further improved
- ... consolidating our models :
  - WIPO Translate heavily used on PATENTSCOPE
     (2.5M words per day)
  - We are doubling our translation capacity
  - Italian models published soon
  - Partnership with private companies

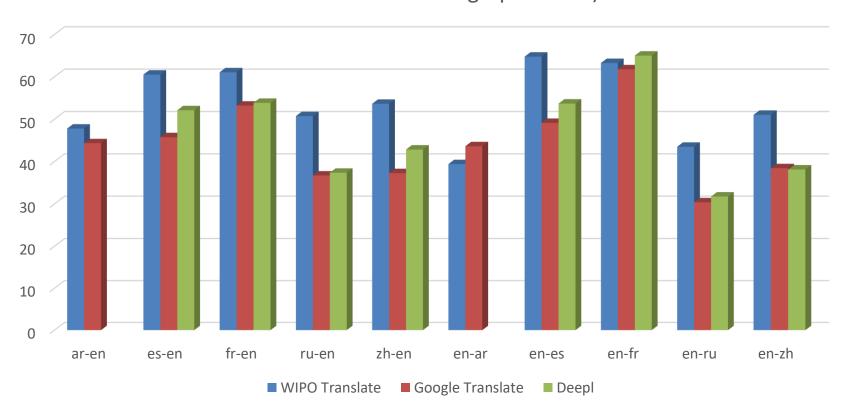
# WIPO Translate usage...





# Benchmarking WIPO Translate

BLEU score on recently published PCT applications (1000 sentences extracted from bibliographic data)



## Partnerships

#### **IPOs:**

Ongoing with KIPO & DPMA

Private companies:

- WIPO Translate installed in private companies (first production level launched today ;-))
- Partnership improves WIPO Translate
  - Getting new training data
  - Improves robustness

Contact: Claudio.Coccorocchia@wipo.int