



# **Kimmo Rossi**

**Translation in the future  
The future of translation**

# Who am I?



## Career milestones

1984 self-employed translator, trainer, project manager etc.

1989 partner, board member at Trantex

1994 EC Delegation in Helsinki

1995 EC Translation Service, Luxembourg

2000 EC, DG Information society

2005 EUROSTAT

2007 EC, DG CONNECT



## EU language & translation services

Employ over 7000 translators and support staff, plus thousands of free-lancers. Multilingualism budget: 1B€

The following EU institutions have the largest translation services: Commission, European Parliament, Court of Justice, Council

Interpretation: Commission, Parliament, Court of Justice have ca. 1000 staff interpreters, plus thousands of free-lancers

Freelance translation job opportunities:

[https://ec.europa.eu/info/translation/tendering-contracts\\_en](https://ec.europa.eu/info/translation/tendering-contracts_en)

Working as freelance interpreter:

[http://europa.eu/interpretation/index\\_en.htm](http://europa.eu/interpretation/index_en.htm)



## How does Statistical Machine Translation (SMT) work?

You need:

- Large text in source language and its translation in the target language (=parallel corpus)
- Even larger text in the target language (=monolingual corpus)
- toolkit (such as MOSES) to create your SMT system
- a powerful computer (lots of memory, disk space and processing power)
- some programming skills to set it up

It is all free (except the computer), but a bit difficult.



*How does Neural Machine Translation work?*

*Good presentation at 2016 Translating Europe Forum:*

*John Kelleher (starting from 2:00:00)*

<https://webcast.ec.europa.eu/translating-europe-forum-2016-jenk-1>

*Program, slide shows:*

[https://ec.europa.eu/info/events/translatingeurope\\_en](https://ec.europa.eu/info/events/translating-europe_en)



*Check the online demonstrators:*

# Neural MT



Try and Compare – Microsoft Translator

Try and Compare – Microsoft Translator

Reader

Myremote Recette de C...cette facile xuzhou jian...ogle Search The Hong Ko... of History орешек Hm6.ru Hvorostovsk... – YouTube Moussorgski... – YouTube J.S. Bach – Weihnachtsoratorium BWV248... Bing Translator Try and Compare – Microsoft Translator Пельмени — Википедия



## Try & Compare

Artificial Intelligence, powered by neural networks

Russian



Тесто для пельменей готовится из муки, яиц и воды (реже молока). Начинка классических пельменей изготавливается из говядины, свинины и/или баранины с добавлением различных специй, лука, иногда чеснока, возможно использование также мяса медведя, оленя, лосся, гуся, рыбы, свиного сала, картофеля, капусты.

303/1000

Translate & Compare!

English



Arabic

The test for the dumplings is prepared from flour, eggs and water (less than milk). The filling of classical dumplings is made of beef, pork and/or ovine with the addition of various spices, onions, sometimes garlic, and

The dough for the dumplings made from flour, eggs and water (milk). Filling the classic dumplings made from beef, pork and/or lamb with adding various spices, onions, garlic, sometimes it is possible to

✓ Is this better?

✓ Is this better?

# Neural MT



Systran Pure Neural™ MT Demo

Translation Tools

Text Translation

This demo platform allows you to experience Pure Neural™ machine translation based on the last Research community's findings and SYSTRAN's R&D. You can translate up to 2000 characters of text in the languages proposed below. Check out the [information page](#) to learn more.

Russian - Detected    English

Filter    Select a profile    Translate    Settings

Тесто для пельменей готовится из муки, яиц и воды (реже молока). Начинка классических пельменей изготавливается из говядины, свинины и/или баранины с добавлением различных специй, лука, иногда чеснока, возможно использование также мяса медведя, оленя, лоси, гуся, рыбы, свиного сала, картофеля, капусты.

Dough for пельменей is prepared from flour, eggs and water (less milk). The white пельменей is made of beef, pork, and/or mutton with the addition of various spices, onions, sometimes garlic, possibly using the bear, deer, straw, goose, fish, grasses, potatoes, potatoes.

# Resources



## *Trends*

- Integration/customization of translation technology
  - CAT-MT-terminology-workflow
  - build your own MT, self-learning MT
- More text gets translated (thanks to automation)
  - but quality remains problematic
- Translators will be in high demand
  - but will find themselves in new professions
  - technology skills are in high demand
- Interpreters are “safe”
- Difficult languages (Finnish etc.) remain the territory for human translators for some time
- Multilingual online platforms (also public services)

# Resources



## *Language resources and tools*

- JRC Language Technology Resources  
<https://ec.europa.eu/jrc/en/language-technologies>
- DGT-TM (EU translation memory)  
<https://data.europa.eu/euodp/en/data/dataset/dgt-translation-memory>
- Open Source parallel corpora  
<http://opus.lingfil.uu.se/>
- META-SHARE language resource repository  
<http://www.meta-share.eu/>
- EU Institutions' term data base (IATE)  
<http://iate.europa.eu>
- EuroTermBank  
<http://www.eurotermbank.com/>



**Спасибо!**