



DEEP LEARNING, NEURAL NETWORKS AND ARTIFICIAL INTELLIGENCE

SYSTRAN Pure Neural™ Machine Translation: first positive customer feedback! Applications available early 2017

Paris, France, December 20th, 2016 – SYSTRAN, the first global editor to launch a neural translation engine for businesses, last October, is pleased to announce that the initial customer feedback is positive and encouraging. The editor also announces the upcoming productization of this new revolutionary technology with specialization to specific domains on the way.

A comprehensive evaluation process entrusted to Crosslang and the first positive feedback of beta tester customers

In order to provide the market with an **independent analysis**, SYSTRAN has entrusted Crosslang, a consulting company specializing in linguistic technologies, with the evaluation of the quality of its new PNMT™ engine. The study is still underway but the initial results were unveiled at the SYSTRAN Community Day in Paris on December 12th:

"The new PNMT™ technology offers unmatched translation quality and fluidity in the history of automatic translation. There are still areas of improvement on which R&D teams are already working. This technology will undoubtedly open up new perspectives for translators and contributors in a globalized world," says **Heidi Depraetere, founder of Crosslang**.

SYSTRAN also launched a **beta test program** with a sample of customers who have highlighted that the PNMT™ technology will enable them to solve **new kinds of large scale translation challenges more efficiently**.

In the words of **Lori Thicke**, the **CEO of Lexcelera**, a Language Service Provider, *"Usually with machine translation, there is a lot to correct, unless you have trained the engine very, very well. That's our specialty, training good MT engines. But this time, the SYSTRAN PNMT™ engine was a completely untrained, generic engine. And still, the translation was amazing. I needed to make corrections, of course. But I was surprised how few errors there were. Mostly the SYSTRAN PNMT™ engine understood what I wanted to say, and translated it very fluidly. For the most part, the terminology was spot on, and the sentences, well, they sounded human."*

Dominique Auzias, founder of **Petit Futé**, one of the leading players in tourist information and mediation, explains: *"When we decided to go global, we quickly understood that only a powerful translation technology could allow us to enter these new international markets. A key to our success involved integrating the technology at the heart of our production chain to ensure that massive amounts of dynamic content could be automatically published in several languages. PNMT™ technology provided by SYSTRAN is a new step for human communication in general, and for tourism in particular. It brings a magnificent field of opportunities, new experiences, an exciting trip in languages! Augmented Tourist 2.0 is ReadyToGo."*

A growing number of languages and available products beginning of 2017

Following the release of the first version mid-October, the PNMT™ engine covers 15 new language pairs for a total of more than **45 language pairs**. These new languages include French <> Chinese, English <> Russian, English <> Hungarian, English <> Hebrew, among others. Improvements have also been made on the treatment of unknown



words and the handling of named entities (names of people, places, dates, organisms, etc.) and long sentences.

In the first quarter of 2017, the SYSTRAN PNMT™ engines will incorporate the broad infrastructural complementary functionality that are available to all SYSTRAN MT engines. Customers will benefit from the full power of this new engine in their current solution with all the same functionalities such as processing many file formats, customization with user dictionaries and translation memories, real-time translation, named-entity recognition, integration into Office tools...

SYSTRAN's R&D is also working to make this technology, although greedy in computing power, available on a corporate server. The key to achieving high-quality results is to create deep networks that require large computing capabilities. On the other hand, once the models have been formed, SYSTRAN has developed processes to transfer knowledge to networks that are smaller and therefore faster to such a point that they are available on smartphones for real-time applications.

With specialization, the potential of neural machine translation is highly enhanced

With its new PNMT™ engine, SYSTRAN can optimize neural networks in a **post-training process called specialization. This method significantly improves the quality of translation in record time.**

Jean Senellart, CEO of SYSTRAN, explains: *“Adaptation of translation to a specific domain such as legal, marketing, technical, pharmaceutical, is an absolute necessity for global companies and organizations. Offering professionals specialized translation solutions in their trade terminology has been part of SYSTRAN's DNA for many years. The generation of neural engines offers new capabilities in domain adaptation. PNMT™ is able to adapt a generic model to new data and even to each translator. Generic NMT is undoubtedly a great improvement in translation technology, but **Specialized NMT** is the technology that will truly help companies meet their global challenges.”*

About SYSTRAN

To help organizations enhance multilingual communication and increase productivity, SYSTRAN delivers specialized language solutions for global collaboration, search, eDiscovery, content management, customer support, e-commerce and localization projects.

With the ability to facilitate communication in 140+ language combinations with highly secured and custom-made solutions, SYSTRAN is the leading choice of corporates, defense and security organizations, and language service providers.

Since its early beginnings, SYSTRAN has been pioneering advances in Machine Translation and Natural Language Processing and delivers today a new generation of engines leveraging the latest technological innovations from Artificial Neural Networks and Deep Learning models.

For more information, visit www.systrangroup.com, read articles at <http://blog.systransoft.com> and experience PNMT™ here: <https://demo-pnmt.systran.net>

Contacts

Gaëlle BOU

Marketing & Communications Director, SYSTRAN

Phone: +33 (0)1 44 82 49 00

Email: gaelle.bou@systrangroup.com