

Expert System Achieves a World First by Enhancing Different AI Capabilities Accelerating Human-Like Language Comprehension for Text Analytics

Confirming Cogito® technology leadership and a strong commitment to increasing business efficiencies, Expert System improved knowledge acquisition by using machine learning and semantic understanding

May 15, 2018 – Artificial Intelligence company <u>Expert System</u> today announced key technological advancements in Al. By extending the use of machine learning to streamline Cogito® cognitive capabilities for text analytics, Expert System reinforces its unique technology with ever more *intelligence* enhancing efficiency and quality.

<u>Cogito</u> is the first and only platform on the market capable of merging different AI-based techniques to better understand and leverage any kind of textual communication. At the core of Cogito is a proprietary engine that disambiguates the meaning of words in context thanks to a deep knowledge graph that contains millions of concepts, attributes and relations and covers many languages.

During the years, Expert System has been combining the most advanced AI techniques such as machine learning and deep learning with proprietary semantic and natural language processing algorithms to automatically enrich its knowledge graph with new concepts and relations, with the highest quality and smallest possible effort.

Recent approaches to language modeling based on word embeddings have shown a promising ability to automatically capture the meaning of each word from large collections of documents. By capitalizing on these advances, Expert System's AI researchers have been able to improve the state of the art in capturing the contextualized meaning of words and concepts, combining the rigor of a hand-curated knowledge graph with the richness of language as it occurs in real world scenarios.

The resulting "hybrid" knowledge graph is richer and more expressive than in the past, enhancing Expert System's <u>disambiguation technology</u> and enabling knowledge transfer across languages with immediate benefits for the enterprise market.

"We are proud to be at the forefront of today's Artificial Intelligence revolution," said Marco Varone, President and CTO of Expert System. "Working together with the scientific community is a relevant part of our R&D and innovation strategy aiming to harness the power of AI. Our work improves efficiency and effectiveness of AI solutions, delivering the most advanced solutions our customers need to simplify and optimize their business processes."

As a pioneer in the research of hybrid (semantic and statistical) methods to natural language processing, Expert System's Cogito Lab in Madrid, Spain recently presented this strategic line of research (<u>Towards a Vecsigrafo: Portable Semantics in Knowledge-based Text Analytics</u>) to the scientific community at the latest HSSUES workshop (<u>Hybrid Statistical Semantic Understanding and</u>



<u>Emerging Semantics</u>), held in colocation with ISWC, the premier event for research and innovation related to the Semantic Web.