



Press release

16 April 2018

Alicante joins forces with CEA to improve its expertise in artificial intelligence

Alicante, publisher of hospital data-based software , and CEA have joined forces to improve the company's positioning in artificial intelligence. Alicante will use CEA's *Expressif* tool to optimize its Inquia platform service offer dedicated to healthcare institutions, clinical research facilities (including pharmaceutical laboratories), the health insurance sector and veterinary services. It will be possible to offer practitioners personalized care for their patients as part of healthcare delivery, even for complex cases.

By going beyond intuition and human analytical capabilities as well as those of traditional information management software tools, the "intelligent" processing of big data produced in many business sectors is a widely recognized opportunity for creating value.

Pioneer in the use of artificial intelligence (AI) for healthcare data, Alicante has been building new predictive indicators based on actual customer data and maintaining them over time for nearly 20 years.

With 500 healthcare sites using its expertise and 25 million patient files analyzed, Alicante is developing its R&D potential in artificial intelligence to bring the best algorithms to companies in other sectors seeking to organize their rich, heterogeneous and difficult-to-master data in a useful way.

Alicante's Inquia AI platform

Inquia includes the following modules:

- Inquia-Lex: Semantic analysis
- Inquia-Profile: Profile generation, learning, classification, prediction
- Inquia-Biclust: Unsupervised groupings, big data, prediction
- Inquia-Group: Supervised multi-criteria groupings

The use of these modules on routine hospital data has already proven its effectiveness for healthcare services, hospitals and research departments, and contributes greatly to improving patient service.

Many applications report a significant return on investment: time saving for health care providers, an improvement in the quality of computerized patient records due error detection, and real-time detection of patients at high risk (such as for infection) or who could be included in clinical trials. In addition to real added value, the return on financial investment amounts to several million euros each year in some institutions and clinic groups.

Fine tuning decision support for professionals

With the new *Inquia-LF* module, Alicante continues to develop its *IA Inquia* platform with CEA-LIST's teams. Able to perform subtle tasks taking into account many parameters, CEA LIST's *Expressif* software will be integrated

into Alicante's products to further increase the relevance and effectiveness of decision support tools in healthcare as well as other fields.

"Mastering data, its use and security is at the heart of the concerns of the CEA LIST teams," explains Philippe Watteau, Director of CEA LIST. "Our partnership with Alicante illustrates the growing contribution of AI to health, patient and practitioner service."

"By deploying *Expressif*, our solutions will be able to acquire more detailed knowledge, assist human decision-making processes and justify these decisions in order to ensure appropriate patient follow-up and facilitate relations between patients and healthcare providers. For example, particularly with patients suffering from multiple and complex pathologies, it will be possible to offer institutions and practitioners optimized healthcare delivery by bringing the patient's clinical situation closer to all available medical knowledge," explains David Delerue, Alicante CEO.

Alicante's software suite (ScanSIH, DIMBox, eLUCID, Opcyclin, and Phygie) will then benefit from capabilities that are unique to the market such as advanced knowledge management, flexibility and scalability of the decision support system while taking into account observation uncertainty.

Expressif

Developed by the teams of CEA-LIST, a CEA Tech institute, *Expressif* is an expert system or decision support system that models human reasoning. *Expressif* combines the use of different formal procedures to assess the facts in a nuanced way. When assessing the situation, the rules are no longer either true or false, but more or less verified, and action that is more appropriate to the situation is suggested. These systems are capable of capitalizing on human expertise and this process can be a direct expression of knowledge or the result of learning algorithms capable of finding expert knowledge in data sets.

Current hospital and institutional partners

The Hospital Group of the Catholic Institute of Lille (GHICL) and Valenciennes Hospital Center are forerunners in the integration of artificial intelligence into their hospital IT tools and will play a major role in this Alicante-CEA collaboration thanks to their expertise in model design and validation.

Supported by the Hauts-de-France region, BPI and the Lille metropolitan authority, the collaboration is in the development phase and will be completed in late 2018.

Press Contacts

Alicante: Edith Sénéchal – +33 (0)3 2855 9250 – edith.senechal@alicante.fr

CEA: François Legrand – +33 (0)1 6450 2011 – francois.legrand@cea.fr

About Alicante

Alicante is the editor of the IA INQUIA platform.

Alicante represents 18 years of experience alongside outstanding research laboratories that has brought benefits to the healthcare sector. Alicante is a pioneer in the use of artificial intelligence with healthcare data. More than 500 healthcare sites use Alicante's expertise.

About CEA

The French Alternative Energies and Atomic Energy Commission (CEA) is a public research organization active in four main areas: defense and security, nuclear and renewable energies, technological research for industry, and fundamental research. CEA-LIST, an institute of CEA Tech, the technology research center of CEA, focuses its research on smart digital systems. With potentially major economic and social implications, its R&D programs focus on advanced manufacturing, cyberphysics systems, artificial intelligence and technologies for the digital patient. In developing cutting-edge technology, CEA-LIST helps its partners enhance their industrial competitiveness through innovation and technology transfer. Since 2016, CEA Tech has been located at the EuraTechnologies site in Lille in the Hauts-de-France region, where it furthers innovation efforts in local companies.

Image: ©fotolia

