Date: July 17, 2018
Publication: AD
Title: Our country belongs to the top
Author: David Bremmer

Our country belongs to the top

Europe is not at lagging in the field of artificial intelligence. Amsterdam is even developing into a hotspot, says Michelle Gregory of Elsevier.

The mantra is well known: The United States and China have a big lead in artificial intelligence and threaten to put Europe on an unbridgeable gap. This spring, the European Commission announced that it wanted to invest 20 billion euros in research into artificial intelligence. The capital injection is 'essential for the competitiveness of Europe', said Euro commissioner Andrus Ansip (digital agenda and vice president).

At Elsevier in Amsterdam they have a different experience. "There is no shortage of top research into artificial intelligence and machine learning in Europe, a recent study shows that European countries are even slightly ahead in terms of the amount of academic research," says Michelle Gregory in the office at Sloterdijk. Since 2014, the 48-year-old American has been managing the AI efforts at Elsevier, the scientific and health business of Elsevier, which is part of RELX Group.

For the past three years she has been building a team in the capital, which now has dozens of specialists. Much of that manpower comes from Dutch universities, especially the University of Amsterdam and Erasmus University Rotterdam. Among them are many foreign students, who are quite happy to remain living in Amsterdam. “We have about 15 nationalities on board.”

High level
Elsevier has no trouble finding good quality staff or interns, says Gregory, who herself has a PhD in computer linguistics. "I do not feel like I have to modernize an antique system," she says with a laugh. In fact, the university degree programs in data science and artificial intelligence are of a high level. "In the area of search and recommendation technology, the UvA is world top, we get excellent students as interns."

She says that Amsterdam is developing into a hotspot in that area. "In Europe, Berlin and Amsterdam are the places to be if you start from scratch and want to build a startup. You have the UvA, the Amsterdam Internet Exchange and all kinds of institutes and companies like us. The advantage that the US does have is mainly in the marketing of that knowledge. The tech companies in Silicon Valley are now bringing all kinds of intelligent products and services to the consumer, like Amazons smart speaker Alexa. The Apple's, Google's and Facebook's of the world are buzzing with money and can get the best heads from universities. At the same time there are also sectors, such as the pharmaceutical industry, where European players are ahead with artificial intelligence.”

Advertising pluggers
In the rat race for talent Elsevier is doing fine, says Gregory. For many students, the information specialist appears to be an attractive employer. "At the career event of network organization Amsterdam Data Science earlier this year, the Elsevier stand attracted more interest than that of Facebook and Google."

She does not think that is strange. "No matter how cool those companies and their services may seem, in fact they are advertising pluggers. Students know that Elsevier is the place to learn about

artificial intelligence and to have real impact. That Elsevier and parent company RELX are so committed to artificial intelligence is logical."

The Elsevier division that Gregory manages 2,500 journals in the fields of science, health care and technology. It therefore has a database with tens of millions of scientific publications. In the print age it was not that easy, but now that mountain of data is worth gold. Through intelligent algorithms and artificial intelligence, information is analysed and patterns can be discovered.

Predictive analyses
"We can assist doctors and help, for example, to make a diagnosis. Now they often have only fifteen minutes per patient. By combining age, illness history and all information from patients' files with the complaints, it is much easier to recognize a clinical picture." Predictive analytics are the future.

"Then we can assess whether someone is going to get a certain disease."

It is up to Gregory to make all information accessible to doctors, pharmaceutical and technical companies. For example, Elsevier has built algorithms that draw data from tables. "In scientific journals, 60 percent of the data is in charts and tables. Thanks to our software, it no longer matters what a table looks like, we get that data out of it." In the coming years, Gregory believes big steps can be taken. Progress will not even be in radically new innovations.

Amazing fast computers
The American says that her staff regularly talks enthusiastically about self-driving cars, robots and all the possibilities of modern times. "But all those algorithms and techniques have been around for a long time, I have been working on this at the university a quarter of a century ago." The difference: then there were no amazing fast computers to use them. "The current generation of microchips does have the speed and computing power. Nowadays we can bring an algorithm to the market in three months. Our team has at least fifteen nationalities on board."

n.b: this article originally appeared in Dutch and has been translated to English in-house.