Science Business - 08/04/2025 - French AI clusters target collaborative, ethical use cases

France has committed €360 million to nine AI clusters, which bring together research, innovation and education

There was a distinctly European feel to the inauguration of the PostGenAl@Paris cluster at Sorbonne University on April 1, in which artificial intelligence is seen as a challenge as much as an opportunity.

The goal, university president Nathalie Drach-Temam explained, is to develop AI that is "open, ethical and honest." In response to the misuse of AI to spread misinformation, Drach-Temam insisted on the



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university's responsibility to work on questions of quality, data storage and "a better understanding of what [AI] is and what it isn't."

PostGenAl@Paris is one of nine proposals for Al clusters selected in May 2024 for a total of €360 million in public funding, as part of the €2.5 billion national artificial intelligence strategy launched in 2018 and the France 2030 innovation strategy.

The goal of the clusters is to transform a handful of universities into internationally recognised centres of excellence, capable of training and attracting the best talent, and to develop diverse use cases in partnership with industry.

French president Emmanuel Macron wants to turn France into an Al powerhouse, and he used February's Al Action Summit in Paris to pitch his country to global Al developers. Macron has also called on the EU to cut red tape to stimulate innovation. But in the clusters, universities, industry and other actors are coming together to seek a balance between speed and responsibility.

"All the clusters go in the same way: a European one," said <u>Frédéric Pascal, director of the DATAIA Institute at Paris-Saclay University,</u> awarded €20 million to become an Al cluster, which was inaugurated on April 7. Both sovereignty and trustworthy Al are top priorities for academic and industrial partners, he told Science | Business.

Interdisciplinarity

PostGenAl@Paris, awarded €35 million in government funding over five years, is led by the Sorbonne Centre for Artificial Intelligence (SCAI), which was created in 2019. It brings together 16 academic institutions, more than 60 industrial partners, and partners as diverse as the French National Museum of Natural History.

With the cluster's inauguration, "we are embracing many more partners, new disciplines and new areas of research," SCAI director Gérard Biau told Science | Business at the launch event.

The consortium is working around three main themes: generative intelligence and disruptive technologies, with applications areas including engineering and the modelling of fluid dynamics; health and desirable futures, such as robotic surgery; and resilient society and education, including the use of AI to facilitate justice.

The cluster is structured around 21 Collaborative Acceleration Programmes (CAPs), which are equivalent to "interdisciplinary research chairs," Biau said. Each CAP includes two principal investigators (PIs) from different institutions, for instance Sciences Po and Sorbonne University, as well as other researchers, stakeholders and industrial partners.

"Some of the chairs are devoted to pushing the limits of technology, so we have for example chairs on autonomous vehicles, on vision transformers," Biau said. Others focus on social sciences, for instance the mechanisms of AI within democracy, or on applied uses such as AI in medicine.

DATAIA takes a similar approach, built on three pillars: the mathematical foundations of AI; health; and physics and the environment. The institute was launched in 2017 with a focus on research activities, before the government gave it responsibility for training in 2022. Now, as a cluster, it will add innovation activities.

Its research support is based around two types of chairs of excellence: chairs with one or two PIs in a specific domain, and "synergy chairs" with three or four co-PIs. The idea of the synergy chairs is to make junior and senior researchers work together, and to have people from different disciplines collaborate. That could be, for instance, mathematics, computer science and health.

"All those chairs are open to industrial partners, meaning they can enter the chairs by funding extra research activities," Pascal added.

Innovation activities focus predominantly on start-up creation. The cluster works with the 21st incubator, run by CentraleSupélec, as well as with business schools.

International talent

When it comes to education, DATAIA is delivering training for both AI experts and students in other disciplines, including a new master's degree in trustworthy AI developed in collaboration with industry. It also delivers executive education, for instance for experienced engineers who are not trained in AI.

There will also be a teaching element in each of the Collaborative Acceleration Programmes at PostGenAl@Paris. "That's the DNA of the university and the singularity of SCAI," Biau said.

Macron has set the goal of increasing the number of people trained in AI from 40,000 to 100,000 per year by 2030; the clusters will have a key role to play in delivering this education while attracting international talent.

As the US government multiplies its attacks on research budgets and academic freedom, Biau sees an opportunity to entice European colleagues back to France and to attract senior US researchers. "It's a very important opportunity, and I think France won't miss this opportunity."

SCAI already works with research centres around the world, particularly in Germany, and last month, the French Udice and German U15 alliances of leading research universities held a joint workshop on AI.

Biau hopes to build more international connections through activities such as student exchanges and joint research projects. "We now have the tools to have more close partnerships with European partners," he said.

The nine clusters, from Grenoble to Toulouse, will also work together on training and potentially co-funding projects.

Meanwhile, both Sorbonne and Paris-Saclay are among 14 higher education institutions collaborating with French company Mistral AI and the EdTech France network to evaluate the impact of AI on teaching. They will also define responsible AI use in higher education and develop methods of evaluation adapted to the realities of the AI era.

By Martin Greenacre