

International lab dedicated to artificial intelligence kicks-off in Montreal

Montreal-based centre unites strengths of McGill University, ÉTS, Mila, CNRS, Université Paris-Saclay, and CentraleSupélec

A consortium of research organizations has gathered together to form a new International Research Laboratory (IRL) focused on artificial intelligence (AI) in Montreal. The new centre gathers together McGill University, École de technologie supérieure (ÉTS), Mila – Quebec AI Institute, France's Centre Nationale de la Recherche Scientifique (CNRS), Université Paris-Saclay, and the École CentraleSupélec. The move confirms Montreal's status as a leader in AI.

While great strides have been made in AI recently, there is still a pressing need for new theoretical knowledge to better understand not only the capacities of this new technology, but how it achieves its results. The ILLS will focus on five main themes of research: fundamental aspects of artificial intelligence, sequential (real-time) machine learning, robust autonomous systems, natural language and speech processing, and applications to computer vision, signals, and information processing.

In addition, the new centre will emphasize interdisciplinary collaborations with an aim to develop new methodologies and integrate these techniques into learning systems.

"This new laboratory confirms Montreal's global leadership in Al," said Benoit Boulet, Associate Vice-Principal, Research & Innovation at McGill University. "This is a major hub with a talent pool that continues to deepen, and McGill researchers and students are embedded at every level of this activity. This new initiative will offer opportunities for our researchers to make even more breakthrough discoveries."

"The expertise of ÉTS in AI includes several laboratories and research chairs in artificial intelligence. This collaboration between France and Quebec makes it possible to innovate and deepen research in AI, a cross-cutting discipline from which we can benefit in many fields, including health, the built environment, robotics, and the Internet of Things. It is therefore with pride that ÉTS welcomes the new ILLS center within its establishment," said Christian Casanova, Director of Research and Partnerships at ÉTS.

"Through its tools of international cooperation, CNRS supports the most promising cutting-edge joint research projects. The new international research laboratory brings together a powerful network of researchers from France and Québec to advance the knowledge and applications of AI. For the CNRS, this new lab is also an opportunity to strengthen more broadly its ties with the whole Canadian AI community," said Antoine Petit, Chairman and CEO of CNRS.

"Al at Paris-Saclay involves nearly 1,000 researchers, teacher-researchers, engineers and technicians and around forty laboratories, grouped together within our DataIA Institute. We will make our contribution to the ILLS in the form of the mobility of researchers, including the reception of Canadian colleagues at Paris-Saclay, the reception of Masters trainees, thesis funding in particular/among others. Université Paris-Saclay is honored and proud to be associated with this signing ceremony for the creation of the IRL ILLS and to ensure its joint supervision" added Michel Guidal, Deputy Vice-President Research Sciences and Engineering at Université Paris-Saclay.

"The ILLS, resulting from an unprecedented and international union, offers a unique potential for progress in the field of AI. It is an honor for CentraleSupélec to participate with our prestigious partners in this laboratory. Backed by this research, our teaching will thus be at the forefront of the world in terms of AI," added Romain Soubeyran, Director of CentraleSupélec.

The ILLS will join a burgeoning artificial intelligence (AI) sector in Montreal, which has attracted other major investments from government and business for the past several years. As a result, the city is one of the world's leading hubs in this domain, with an estimated 27,000 workers in AI-related technologies and over 14,000 post-secondary students enrolled in AI-related study programs.

The ILLS is the latest such laboratory to be launched in Canada, specifically in Quebec. In 2014, the CNRS and the Fonds de recherche du Québec – Nature et technologie (FRQNT) signed a letter of intent to support and promote the tradition of scientific cooperation that exists between France and Quebec. This collaboration has resulted in two International Research Laboratories in Quebec, as well as other shared research activities across the province. The CNRS has also established three other IRLs in Canada in partnership with other institutions.

Present at the signing ceremony were: Frédéric Sanchez (Consul General of France), Remi Quirion (Quebec's Chief Scientist), Antoine Petit (CNRS), Suzanne Fortier (McGill University), Francois Gagnon (ETS), Michel Guidal (Université Paris-Saclay), Franck Richecoeur (École CentraleSupélec), and Laurence Beaulieu (Mila).

About McGill University

Founded in Montreal, Quebec, in 1821, <u>McGill University</u> is Canada's top ranked medical doctoral university. McGill is consistently ranked as one of the top universities, both nationally and internationally. It is a world-renowned institution of higher learning with research activities spanning three campuses, 11 faculties, 13 professional schools, 300 programs of study and over 39,000 students, including more than 10,400 graduate students. McGill attracts students from over 150 countries around the world, its 12,000 international students making up 30% of the student body. Over half of McGill students claim a first language other than English, including approximately 20% of our students who say French is their mother tongue.

About ÉTS

<u>École de technologie supérieure</u> is one of ten constituents of the Université du Québec network. It trains engineers and researchers who are recognized for their practical and innovative approach, the development of new technologies and their skill at transferring their knowledge to companies. Almost one-quarter of all engineers in Québec graduated from ÉTS, which boasts 11,000 students at all three university levels, along with 27,000 graduates. ÉTS specializes in applied training and research in engineering, and maintains a unique partnership with the business sector and with industry.

About the CNRS

The National Center for Scientific Research is one of the most recognized and renowned public research institutions in the world. For more than 80 years, it has met a demand for excellence in terms of its recruitment and develops multi- and interdisciplinary research throughout the territory, in Europe and internationally. Directed towards the common good, it contributes to the scientific, economic, social and cultural progress of France. The CNRS is above all 32,000 women and men and 200 professions. Its 1,000 laboratories, mostly shared with universities, schools and other research organizations, represent more than 120,000 people; they advance knowledge by exploring living things, matter, the Universe, and the functioning of human societies. The close link it weaves between its research activities and their transfer to society makes it a key player in innovation today. Partnership with companies is the basis of its promotion policy. It is available in particular through nearly 200 joint structures with industrial players and through the creation of around a hundred start-ups each year, testifying to the economic potential of its research work. The CNRS makes research work and data accessible; this sharing of knowledge targets different audiences: scientific communities, media, decision-makers, economic players, and the general public.

ABOUT UNIVERSITÉ PARIS-SACLAY

<u>Université Paris-Saclay</u> brings together ten constituent faculties and institutes, four Grandes Écoles, the Institut des Hautes Etudes Scientifiques, two associate institutions and shared laboratories with national research organisations. It is ranked as one of the top 20 research universities in the world. With 48,000 students, 8,100 lecturers and 8,500 administrative and technical staff members, Université Paris-Saclay offers a comprehensive and varied range of undergraduate to doctorate level programmes and engineering degrees, renowned for their

quality thanks to the reputation and commitment of the University's academic staff. Located in the south of Paris on vast sites that stretch across Paris, Orsay, Évry and Versailles, Université Paris-Saclay benefits from a strategic geographical and socio-economic position that is strengthened by its international visibility. A leading University, Université Paris-Saclay is recognised for its excellent Mathematics and Physics programmes but also for Biological and Medical Sciences, Agriculture, Engineering, and its extensive Humanities and Social Sciences courses. Close to Paris, Université Paris-Saclay is nested in a protected natural area, at the very heart of a dynamic economic hub.

About Centralesupelec

<u>CentraleSupélec</u> is a public establishment of a scientific, cultural and professional nature, created in January 2015 from the merger of École Centrale Paris and Supélec. Today, CentraleSupélec is made up of 3 campuses in France (Paris-Saclay, Metz and Rennes). It has 4,300 students, including 3,200 engineering students, and brings together 17 laboratories or research teams. Strongly internationalized (30% of its students and nearly a quarter of its teaching staff are international), the school has forged more than 170 partnerships with the best institutions in the world. A leading school in higher education and research, CentraleSupélec is a reference center in the field of engineering sciences and systems, ranked among the best institutions in the world. She is a founding member of the University of Paris-Saclay and chairs the Groupe des Ecoles Centrale (Lyon, Lille, Nantes and Marseille), which operates international locations (Beijing (China), Hyderabad (India), Casablanca (Morocco)).

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