

Press release

SCALE AI announces four new AI research chairs that will undoubtedly stimulate artificial intelligence innovation in Canada

Montréal, December 14, 2021 — SCALE AI is proud to announce the creation of four new AI research chairs in major Canadian universities. These investments will help secure Canada's leadership in AI research by attracting and retaining some of the brightest young researchers in the field. They will join the ranks of some of the world's top experts in artificial intelligence and represent the future of this field. The new chairs are as follows:

- The SCALE AI Research Chair in Artificial Intelligence for Urban Mobility and Logistics, at HEC Montréal, held by Professor Carolina Osorio;
- The SCALE AI Chair in Data Science for Retail, at McGill University, held by Professor Maxime Cohen;
- The SCALE AI Chair in Data-Driven Supply Chains, at Polytechnique Montréal, held by Professor Thibaut Vidal;
- The Data-Driven Algorithms for Modern Supply Chains, at the University of Toronto, held by Professor Elias Khalil.

With \$2 million in funding, provided in equal parts by SCALE AI and each of the four academic institutions, each chair will focus its research on applying AI to different aspects of supply chains. By 2023, SCALE AI will have contributed to the establishment of 10 AI research chairs across Canada, for a total investment of \$20 million.

"As we build back better from this pandemic, these AI research chairs at major universities in Quebec and Ontario will help attract and retain the best talent and create new opportunities in Canada's digital economy," said the **Honourable François-Philippe Champagne, Canada's Minister of Innovation, Science and Industry**.

Julien Billot, CEO of SCALE AI, notes, "We have noticed the incredible impact of AI research chairs on our universities, as they create a favourable environment for the brightest minds to exchange their most creative and innovative ideas. We are proud to be supporting these chairs."

Hélène Desmarais, Co-Chair of the Scale AI Board of Directors, added, "Not only are the chairs supporting projects led by top artificial intelligence professors, they are allowing our universities to play an integral part in the Canadian AI ecosystem, making our country more competitive on a global scale."

Four chairs, four innovative research focuses

The [HEC Montréal](#) Scale AI Research Chair will be focused on simulation-based optimization (SO) for supply chain, logistics, and transportation problems, using state-of-the-art AI methods. Prof. Osorio will lead the development of algorithms to enable supply chain problems to be tackled both at scale and efficiently, such that the algorithms can be readily used by companies and public stakeholders to tackle their most pressing and challenging problems. "The goal of this chair is to allow the use of this detailed data to go beyond what-if analysis and to be used, in a systematic way, to optimize the design and the operations of intricate supply chains," mentioned **Caroline Aubé, Director of Research and Knowledge Transfer, HEC Montréal**.

[McGill University](#)'s proposed research program focuses mainly on developing and deploying new data science methods and tools to help retailers, consumers, and society at large. Given that the vast majority of retailers have started collecting massive amounts of granular data, it is crucial to find effective ways to leverage this data. "Building upon Prof. Cohen's research on data science and retail, the goal of this five-year program is to leverage data science to improve retail practices, while maintaining a strong focus on social welfare and sustainability," mentioned **James McGill Professor Yolande Chan, Dean of the Desautels Faculty of Management**.

[Polytechnique Montréal](#) aims to pursue within the Scale AI Chair in Data-Driven Supply Chains a research agenda focused on supply chains and transportation optimization with a strong emphasis on algorithmic transparency and explainability. "Our goal is to progress towards decision support algorithms combining the optimization strength of state-of-the-art metaheuristics and mathematical programming algorithms with essential extra qualities, such as accuracy, actionability, and interpretability," said **Gilles Savard, Alternate Executive Director at Polytechnique Montréal**.

[University of Toronto](#)'s proposed Research Chair will focus on the mathematical optimization problems underlying much of SCM, and will aim to create the next generation of ML-powered SCM algorithms to tackle Canada's challenges. **Markus Bussmann, Chair & Professor, Mechanical Engineering at the University of Toronto**, said, "The challenges we are targeting pertain to the consequences of COVID-19 for the medical equipment supply chain and vaccine distribution; evolving customer behaviours and expectations that must be addressed to improve Canadian companies' competitiveness in the global market; and the effects of climate change that threaten Canadian food security and require factoring environmental concerns into SCM decisions."

About SCALE AI (scaleai.ca)

The Canadian supercluster specializing in artificial intelligence (AI), based in Montréal, SCALE AI acts as an investment and innovation hub that accelerates the rapid adoption and integration of AI and contributes to the development of a world-class Québec and Canadian AI ecosystem.

Funded by the federal and Québec governments, SCALE AI has nearly 120 industry partners, research institutes and other players in the AI field. SCALE AI develops programs aimed at supporting investment projects of companies that implement real-world AI applications, the emergence of future Canadian flagships in the sector, as well as the development of a skilled workforce.

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