

NEW PROFESSORS*

Research Interests	Professors	Affiliations
Causality	<ul style="list-style-type: none"> • Christopher Pal • Simon Lacoste-Julien • Yoshua Bengio 	<ul style="list-style-type: none"> • Polytechnique / UdeM • UdeM • UdeM
Climate change	<ul style="list-style-type: none"> • Yoshua Bengio 	<ul style="list-style-type: none"> • UdeM
Computational photography	<ul style="list-style-type: none"> • Christopher Pal 	<ul style="list-style-type: none"> • Polytechnique / UdeM
Computer vision	<ul style="list-style-type: none"> • Aaron Courville • Aishwarya Agrawal* (August 2020) • Christopher Pal • Hugo Larochelle • Nicolas Le Roux • Simon Lacoste-Julien 	<ul style="list-style-type: none"> • UdeM • UdeM • Polytechnique / UdeM • Google Brain / McGill / UdeM • McGill • UdeM
Continuous optimization	<ul style="list-style-type: none"> • Irina Rish • Ioannis Mitliagkas • Simon Lacoste-Julien 	<ul style="list-style-type: none"> • UdeM • UdeM • UdeM
Distributed systems	<ul style="list-style-type: none"> • Ioannis Mitliagkas 	<ul style="list-style-type: none"> • UdeM
DL	<ul style="list-style-type: none"> • Aaron Courville • Aishwarya Agrawal* (August 2020) • Christopher Pal • Hugo Larochelle • Ioannis Mitliagkas • Irina Rish • Joelle Pineau • Laurent Charlin • Marc G. Bellemare • Nicolas Le Roux • Pascal Vincent • Sarath Chandar • Siamak Ravanbakhsh • Simon Lacoste-Julien • William L. Hamilton • Yoshua Bengio 	<ul style="list-style-type: none"> • UdeM • UdeM • Polytechnique / UdeM • Google Brain / UdeM • UdeM • UdeM • McGill • HEC / UdeM • Google Brain / McGill • Google Brain / McGill / UdeM • UdeM • Polytechnique • McGill • UdeM • McGill • UdeM
DL+neuroscience	<ul style="list-style-type: none"> • Blake Richards • Irina Rish • Yoshua Bengio 	<ul style="list-style-type: none"> • McGill • UdeM • UdeM

Dynamical systems	<ul style="list-style-type: none"> ● Irina Rish ● Yoshua Bengio 	<ul style="list-style-type: none"> ● UdeM ● UdeM
GANs	<ul style="list-style-type: none"> ● Aaron Courville ● Ioannis Mitliagkas ● Jian Tang ● Simon Lacoste-Julien ● Yoshua Bengio 	<ul style="list-style-type: none"> ● UdeM ● UdeM ● HEC / UdeM ● UdeM ● UdeM
Generative models	<ul style="list-style-type: none"> ● Aaron Courville ● Irina Rish ● Ioannis Mitliagkas ● Laurent Charlin ● Marc G. Bellemare ● Pascal Vincent ● Siamak Ravanbakhsh ● Simon Lacoste-Julien ● Yoshua Bengio 	<ul style="list-style-type: none"> ● UdeM ● UdeM ● UdeM ● HEC / UdeM ● Google Brain / McGill ● UdeM ● McGill ● UdeM ● UdeM
Graph neural networks	<ul style="list-style-type: none"> ● Jian Tang ● Yoshua Bengio 	<ul style="list-style-type: none"> ● HEC / UdeM ● UdeM
information retrieval	<ul style="list-style-type: none"> ● Fernando Diaz 	<ul style="list-style-type: none"> ● Microsoft Research
information theory	<ul style="list-style-type: none"> ● Devon Hjelm ● Irina Rish ● Marc G. Bellemare 	<ul style="list-style-type: none"> ● Microsoft Research / UdeM ● UdeM ● Google Brain / McGill
Interconnected data analysis	<ul style="list-style-type: none"> ● Jian Tang ● Reihaneh Rabbany ● William L. Hamilton 	<ul style="list-style-type: none"> ● HEC / UdeM ● McGill ● McGill
Knowledge graphs	<ul style="list-style-type: none"> ● Jian Tang 	<ul style="list-style-type: none"> ● HEC / UdeM
Learning on graphs	<ul style="list-style-type: none"> ● Jian Tang ● Siamak Ravanbakhsh ● William L. Hamilton ● Yoshua Bengio 	<ul style="list-style-type: none"> ● HEC / UdeM ● McGill ● McGill ● UdeM
Learning to program	<ul style="list-style-type: none"> ● Danny Tarlow 	<ul style="list-style-type: none"> ● Google Brain / McGill
Medical ML	<ul style="list-style-type: none"> ● Doina Precup ● Irina Rish ● Joelle Pineau ● Pascal Vincent ● Yoshua Bengio 	<ul style="list-style-type: none"> ● McGill ● UdeM ● McGill ● UdeM ● UdeM
ML theory	<ul style="list-style-type: none"> ● Ioannis Mitliagkas ● Prakash Panangaden ● Simon Lacoste-Julien 	<ul style="list-style-type: none"> ● UdeM ● McGill ● UdeM
Molecular modeling	<ul style="list-style-type: none"> ● Jian Tang ● Yoshua Bengio 	<ul style="list-style-type: none"> ● HEC / UdeM ● UdeM

Multi-modal learning	<ul style="list-style-type: none"> ● Aaron Courville 	<ul style="list-style-type: none"> ● UdeM
Neural data analysis	<ul style="list-style-type: none"> ● Blake Richards ● Irina Rish 	<ul style="list-style-type: none"> ● McGill ● UdeM
NLP	<ul style="list-style-type: none"> ● Aaron Courville ● Aishwarya Agrawal* (August 2020) ● Christopher Pal ● Devon Hjelm ● Hugo Larochelle ● Irina Rish ● Jackie Cheung ● Laurent Charlin ● Sarath Chandar ● Simon Lacoste-Julien ● Siva Reddy ● William L. Hamilton ● Yoshua Bengio 	<ul style="list-style-type: none"> ● UdeM ● UdeM ● Polytechnique / UdeM ● Microsoft Research / UdeM ● Google Brain / UdeM ● UdeM ● McGill ● HEC / UdeM ● Polytechnique ● UdeM ● McGill ● McGill ● UdeM
Online learning	<ul style="list-style-type: none"> ● Marc G. Bellemare 	<ul style="list-style-type: none"> ● Google Brain / McGill
Optimization	<ul style="list-style-type: none"> ● Geoffrey Gordon ● Ioannis Mitliagkas ● Nicolas Le Roux ● Simon Lacoste-Julien 	<ul style="list-style-type: none"> ● Microsoft Research / McGill ● UdeM ● Google Brain / McGill / UdeM ● UdeM
Probabilistic models	<ul style="list-style-type: none"> ● Aaron Courville ● Christopher Pal ● Danny Tarlow ● Laurent Charlin ● Siamak Ravanbakhsh 	<ul style="list-style-type: none"> ● UdeM ● Polytechnique / UdeM ● Google Brain / McGill ● HEC / UdeM ● McGill
Quantum information theory	<ul style="list-style-type: none"> ● Prakash Panangaden 	<ul style="list-style-type: none"> ● McGill
Reasoning	<ul style="list-style-type: none"> ● Doina Precup ● Siva Reddy 	<ul style="list-style-type: none"> ● McGill ● McGill
Recommender systems	<ul style="list-style-type: none"> ● Laurent Charlin 	<ul style="list-style-type: none"> ● HEC / UdeM
Recurrent neural networks	<ul style="list-style-type: none"> ● Yoshua Bengio 	<ul style="list-style-type: none"> ● UdeM
RL	<ul style="list-style-type: none"> ● Blake Richards ● Devon Hjelm ● Doina Precup ● Geoffrey Gordon ● Joelle Pineau ● Laurent Charlin ● Marc G. Bellemare ● Pierre-Luc Bacon ● Yoshua Bengio 	<ul style="list-style-type: none"> ● McGill ● Microsoft Research / UdeM ● McGill ● Microsoft Research / McGill ● McGill ● HEC / UdeM ● Google Brain / McGill ● UdeM ● UdeM

Robotics	<ul style="list-style-type: none"> ● Joelle Pineau 	<ul style="list-style-type: none"> ● McGill
Semantics and logics for probabilistic systems and languages	<ul style="list-style-type: none"> ● Prakash Panangaden 	<ul style="list-style-type: none"> ● McGill
Spectral learning	<ul style="list-style-type: none"> ● Geoffrey Gordon 	<ul style="list-style-type: none"> ● Microsoft Research / McGill
Tensor factorization	<ul style="list-style-type: none"> ● Guillaume Rabusseau 	<ul style="list-style-type: none"> ● UdeM

Last update: December 9, 2019