Academic CV

Université de Montréal

The University of Montreal
and of the world.

Subject

Date Oct. 7, 2022 | Period covered: Lifetime

Identification and Personnal Information

Dr. Fabian Bastin
Université de Montréal, Canada
Informatique et Recherche Opérationnelle

Address

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Education

Degrees

Degree Type	Name / Specialization	Organization	Status	Completion
Doctorate	Mathematics	Facultés universitaire Notre-Dame de la Paix, Belgium	Completed	03/2004
Master's Equivalent	Mathematics	Facultés universitaire Notre-Dame de la Paix, Belgium	Completed	06/1999
Post-doctorate	Algorithmics	Centre Européen de Recherche et de Formation Avancée en Calcul Scientifique	Completed	12/2006
Post-doctorate	Transportation	Imperial College of Science, Technology and Medicine, United Kingdom	Completed	12/2004

Degree Type	Name / Specialization	Organization	Status	Completion
Diploma	Mathematics	Facultés universitaire Notre-Dame de la Paix, Belgium	Completed	09/2001
Bachelor's Equivalent	Mathematics	Facultés universitaire Notre-Dame de la Paix, Belgium	Completed	06/1997

Professional and Academic Experience

Academic Experience

Position	Organization	Department	Dates
Professeur Titulaire	Université de Montréal, Canada	Informatique et Recherche Opérationnelle	Started 06/2019
Chargé de Cours	École Polytechnique de Montréal, Canada	Mathematics and Industrial Engineering	01/2018 - 02/2018
Professeur invité	École Nationale d'Aviation Civile	Applied Mathematics, Computer Science and Control	01/2015 - 02/2015
Professeur Agrégé	Université de Montréal, Canada	Informatique et Recherche Opérationnelle	06/2013 - 05/2019
Professeur invité	Facultés universitaire Notre-Dame de la Paix, Belgium	Mathematics	04/2011 - 05/2011
Professeur Adjoint	Université de Montréal, Canada	Informatique et recherche opérationnelle	01/2007 - 05/2013
Researcher	Facultés universitaire Notre-Dame de la Paix, Belgium	Mathematics	09/1999 - 09/2000

Affiliations with Research Centers/Groups or Other Institutions

Position	Organization	Dates
Researcher	Fin-ML	Started 05/2018
Researcher	IVADO	Started 02/2016
Associate Professor	Université de Montréal, Canada	Started 06/2013
Regular Member	Centre Interuniversitaire de Recherche sur les Réseaux d'Entreprise, la Logistique et le Transport	Started 04/2008
Assistant Professor	Université de Montréal, Canada	01/2007 - 05/2013

Leaves of Absence

Leave Type	Absence and Impact Description	Dates
Medical	I suffered a ruptured brain aneurysm, leading to a subarachnoid hemorrhage, on March 10, 2013, and was hospitalized at the Montreal Neurological Institute from March 11 to March 29, 2013. As a result, I was on medical leave until June 30, 2013, with a nearly complete incapacity for work for about two months. I officially gone back to work on July 1, 2013, with restrictions, and at full-time on September 1, 2013. In the first few months after the accident, I had concentration problems and frequent head pain, as well a chronic fatigue. There are still some minor effects on the motor level, and I was subject to fatigue and severe headaches during the academic year 2013-2014, slowing down my research.	03/2013 - 06/2013

Teaching Activities

Courses Taught

Undergraduate Courses – Theoretical and Practical Teaching

Course Details	Unit	Teaching Mode	Semester	Students	Annual Load
IFT2505 Optimisation linéaire	Informatique et rech. opér.	En personne	Fall 2021	54	3 credits
IFT3515 Programmation non linéaire	Informatique et rech. opér.		Fall 2020	12	3 credits
IFT2505 Programmation linéaire	Informatique et rech. opér.		Fall 2020	59	3 credits
IFT3515 Optimisation non linéaire	Informatique et rech. opér.	En personne	Winter 2020	11	3 credits
IFT2505 Optimisation linéaire	Informatique et rech. opér.	En personne	Fall 2019	36	3 credits
IFT2505	Informatique et rech.		Summer 2019	1	3 credits

Course Details	Unit	Teaching Mode	Semester	Students	Annual Load
Optimisation linéaire	opér.				
IFT3515 Optimisation non linéaire	Informatique et rech. opér.	En personne	Winter 2019	14	3 credits
IFT2505 Optimisation linéaire	Informatique et rech. opér.		Fall 2018	38	3 credits
IFT2505 Optimisation linéaire	Informatique et rech. opér.	En personne	Fall 2018	39	3 credits
IFT2505 Optimisation linéaire	Informatique et rech. opér.	En personne	Summer 2018	1	3 credits
IFT3515 Optimisation non linéaire	Informatique et rech. opér.	En personne	Winter 2018	10	3 credits
IFT3245 Simulation et modèles	Informatique et rech. opér.		Fall 2017	9	3 credits
IFT3515 Optimisation non linéaire	Informatique et rech. opér.	En personne	Winter 2017	4	3 credits
IFT3245 Simulation et modèles	Informatique et rech. opér.		Fall 2016	20	3 credits
IFT1575 Modèles de rech. opérat.	Informatique et rech. opér.	En personne	Fall 2015	43	3 credits
IFT2505 Optimisation linéaire	Informatique et rech. opér.	En personne	Fall 2013	56	3 credits
IFT3245 Simulation et modèles	Informatique et rech. opér.	En personne	Fall 2012	8	3 credits
IFT2505 Optimisation linéaire	Informatique et rech. opér.	En personne	Fall 2012	38	3 credits
IFT3655 Modèles stochastiques	Informatique et rech. opér.	En personne	Summer 2012		3 credits
IFT3245 Simulation et modèles	Informatique et rech. opér.	En personne	Fall 2011	6	3 credits
IFT2505	Informatique et rech. opér.	En personne	Fall 2011	40	3 credits

Course Details	Unit	Teaching Mode	Semester	Students	Annual Load
Optimisation linéaire					
IFT3245 Simulation et modèles	Informatique et rech. opér.	En personne	Fall 2010	6	3 credits
IFT1575 Modèles de rech. opérat.	Informatique et rech. opér.	En personne	Winter 2010	41	3 credits

Graduate Courses – Theoretical and Practical Teaching

Course Details	Unit	Teaching Mode	Semester	Students	Annual Load
IFT6512 Programmation stochastique	Informatique et rech. opér.	En personne	Fall 2021	35	4 credits
IFT6512 Programmation stochastique	Informatique et rech. opér.	Entièrement en ligne	Winter 2021	4	4 credits
IFT6512 Programmation stochastique	Informatique et rech. opér.		Winter 2020	5	4 credits
IFT6512 Programmation stochastique	Informatique et rech. opér.	En personne	Winter 2018	4	4 credits
IFT6512 Programmation stochastique	Informatique et rech. opér.	En personne	Winter 2017	4	4 credits
IFT6512 Programmation stochastique	Informatique et rech. opér.	En personne	Winter 2016	8	4 credits
IFT6521 Programmation dynamique	Informatique et rech. opér.		Winter 2015	13	4 credits
IFT6521 Programmation dynamique	Informatique et rech. opér.	En personne	Winter 2014	13	4 credits
IFT6561 Simulation: asp. stochastiques	Informatique et rech. opér.	En personne	Fall 2013	17	4 credits

Course Details	Unit	Teaching Mode	Semester	Students	Annual Load
IFT6512 Programmation stochastique	Informatique et rech. opér.	En personne	Winter 2011	3	4 credits
IFT6521 Programmation dynamique	Informatique et rech. opér.	En personne	Winter 2011	6	4 credits

Student Supervision

Postdoctorate

Student	Supervision Description
1. Yergeau, Gabriel (Completed)	Techniques d'apprentissage automatique en courtage haute fréquence - Role: Co-Supervisor, Postdoctorate - Université de Montréal - 01/2018 - 12/2019
2. Nasri, Mostafa (Completed)	Social welfare and the principal-agent problem. - Role: Co-Supervisor, Postdoctorate - Université de Montreal - 09/2009 - 03/2012

Doctorate

Student	Supervision Description
1. Borie, Pierre	Algorithmes de prévision de la demande en électricité - Role: Principal Supervisor, Doctorate - Started 01/2022
2. Carignan, Jean-Francis (Withdrawn)	Méthodes d'apprentissage par renforcement pour le tenue de marchés - Role: Principal Supervisor, Doctorate - Université de Montréal - 09/2019 - 08/2022
3. Rieussec, Jérémy (In Progress)	Méthodes de second ordre sans matrice hessienne en apprentissage statistique - Role: Principal Supervisor, Doctorate - Université de Montréal - 09/2019 - 08/2022
4. Zegbeh, Francis Ange (Withdrawn)	Application de méthodes d'apprentissage automatique en courtage haute fréquence - Role: Principal Supervisor, Doctorate - Université de Montréal - 09/2018 - 08/2022
5. Chantal-Huot, Francis (In Progress)	Développement de techniques d'apprentissage automatique en courtage haute fréquence - Role: Principal Supervisor, Doctorate

Student	Supervision Description
	- Université de Montréal - 01/2018 - 06/2023
6. Khassiba, Ahmed (Completed)	Two-stage stochastic programming for aircraft arrival scheduling under uncertainty - Role: Principal Supervisor, Doctorate - Université de Montréal - 01/2016 - 03/2020
7. Thuy, Anh Ta (Completed)	Staffing and Scheduling Optimization with Chance Constraints in Call Centers - Role: Co-Supervisor, Doctorate - Université de Montréal - 01/2014 - 12/2019
8. Morin, Léonard Ryo (Completed)	Traffic prediction and bilevel network design - Role: Co-Supervisor, Doctorate - Université de Montréal - 09/2013 - 05/2020
9. Mai, Anh Tien (Completed)	Dynamic Programming Approaches for Estimating and Applying Large-scale Discrete Choice Models - Role: Co-Supervisor, Doctorate - Université de Montréal - 05/2013 - 03/2016

Master's

Student	Supervision Description
1. Milot, François (In Progress)	Tarification en assurance IARD avec de l'apprentissage par renforcement - Role: Principal Supervisor, Masters - Université de Montréal - 01/2021 - 04/2022
2. Dallaire, Martin (Completed)	Probabilité de rétention à court terme - Role: Principal Supervisor, Masters - Université de Montréal - 05/2020 - 12/2021
3. Benazzouz, Maria (Completed)	Tarification d'options à l'aide du calcul de Malliavin et comparaison avec des approches par réseaux de neurones. - Role: Principal Supervisor, Masters - Université de Montréal - 05/2019 - 12/2019
4. Chavez, Raul (Completed)	Tarification d'options à l'aide du calcul de Malliavin et comparaison avec des approches par réseaux de neurones. - Role: Principal Supervisor, Masters - Université de Montréal - 05/2019 - 12/2019
5. Desage, Ysael	Algorithme décisionnel intelligent pour systèmes de stockage énergétique

Student	Supervision Description
(Completed)	- Role: Principal Supervisor, Masters - Université de Montréal - 11/2018 - 06/2020
6. Laprés-Chartrand, Jean (Completed)	Measuring RocksDB performance and adaptive sampling model estimation - Role: Principal Supervisor, Masters - Université de Montréal - 09/2018 - 12/2021
7. Raschas, Niels (Completed)	Conception de modèles de demande et d'inventaire de boissons alcoolisées dans l'industrie de loisir. - Role: Principal Supervisor, Masters - Université de Montréal - 05/2018 - 08/2018
8. Malette-Campeau, Marie-Ève (Completed)	Estimating the probability of a fleet vehicle accident: A deep learning approach using Conditional Variational Auto-Encoders - Role: Co-Supervisor, Masters - Université de Montréal - 04/2018 - 06/2020
9. Hénault, Vincent (Withdrawn)	Développement de modèles de prévision de demande et de gestion d'inventaire - Role: Principal Supervisor, Masters - Université de Montréal - 01/2018 - 06/2022
10. Butoyi, Ghislain (Completed)	Valorisation d'option américaine et intégration de techniques d'apprentissage machine - Role: Principal Supervisor, Masters - Université de Montréal - 01/2018 - 08/2018
11. Beaulne, Alexandre (Completed)	European Day-Ahead Electricity Price Forecasting - Role: Principal Supervisor, Masters - Université de Montréal - 10/2017 - 05/2020
12. Cheryl Olagot Koutana (Completed)	Prédiction de la volatilité à court terme à l'aide des SVM - Role: Principal Supervisor, Masters - Université de Montréal - 09/2017 - 05/2018
13. Sboui, Wael (Completed)	Évaluation de politiques d'ordonnancement d'atterrissages d'avions au moyen de simulation Monte Carlo - Role: Principal Supervisor, Masters - Université de Montréal - 09/2015 - 09/2017
14. Abodinar, Laila (Completed)	Stochastic Simulated Annealing - Role: Principal Supervisor, Masters - Université de Montréal

Student	Supervision Description
	- 05/2015 - 06/2018
15. Thuy, Anh Ta (Completed)	Staffing Optimization with Chance Constraints in Call Centers - Role: Co-Supervisor, Masters - Université de Montréal - 09/2011 - 12/2013
16. Morin, Léonard Ryo (Completed)	A dynamic sequential route choice model for micro-simulation - Role: Principal Supervisor, Masters - Université de Montréal - 01/2011 - 05/2013
17. Zehtabian, Shohre (Completed)	Development of new scenario decomposition techniques for linear and nonlinear stochastic programming - Role: Principal Supervisor, Masters - Université de Montréal - 09/2010 - 08/2016
18. Mai, Anh Tien (Completed)	Revisiting optimization algorithms for maximum likelihood estimation - Role: Principal Supervisor, Masters - Université de Montréal - 09/2010 - 05/2013

Undergraduate Interns

Student	Supervision Description
1. Bhaisare, Rajrishi Amar Singh (Completed)	Management of outliers in discrete choice data - Role: Principal Supervisor, Undergraduate intern - Indian Institute of Technology Kharagpur - 05/2018 - 07/2018
2. Pigeon, Pierre-Luc (Completed)	Modeling and simulation of a hydroelectricity generation network - Role: Principal Supervisor, Undergraduate intern - Université de Montréal - 05/2015 - 08/2015

Undergraduate Projects

Student	Supervision Description
1. Hamdi. Ghannem	- Role: Principal Supervisor, Undergraduate project - 01/2022 - 04/2022
2. Bédard, Sandrine (Completed)	Impact du COVID-19 sur l’industrie de la restauration et des bars et facteurs de résilience del’industrie - Role: Principal Supervisor, Undergraduate project - Université de Montréal - 09/2020 - 04/2021
3. Castellano, Maxime	Modélisation des arrivées d'ordres et de signaux dans les marchés haute fréquence

Student	Supervision Description
	- Role: Principal Supervisor, Undergraduate project - 01/2020 - 05/2020
4. Deaudelin, Lauranne (Completed)	Implémentation de la méthode du gradient moyen stochastique - Role: Principal Supervisor, Undergraduate project - Université de Montréal - 09/2018 - 12/2018
5. Laprés-Chartrand, Jean (Completed)	Extensions de l'algorithme du gradient stochastique pour l'estimation de modèles mixed logit - Role: Principal Supervisor, Undergraduate project - Université de Montréal - 05/2018 - 08/2018
6. Brihlante, Alexandre (Completed)	Algorithme du gradient stochastique pour l'estimation de mode?les de choix discrets - Role: Principal Supervisor, Undergraduate project - Université de Montréal - 09/2017 - 12/2017

Examination Activities

Student	Examination Detail
1. Perreault-Lafleur, Carl	A stochastic integer programming approach to reserve staff scheduling with preferences - Role: Master's Proposal Defense Member, Masters - Thesis jury (Msc) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 10/2022
2. Dakouré, Caroline	- Role: Master's Proposal Defense Member, Masters - Thesis jury (Msc) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 07/2020
3. Mantovani, Serena	- Role: Master's Proposal Defense Member, Masters - Thesis jury (Msc) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 06/2020
4. Goyette, Kyle	- Role: Master's Proposal Defense Chair, Masters - Thesis jury (Msc) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 05/2020
5. Savard, Marc-Antoine	- Role: Master's Proposal Defense Member, Masters - Thesis jury (Msc) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 02/2020
6. Singh, Harsh Jot	Prediction of the Transaction Confirmation Time in Ethereum Blockchain

Student	Examination Detail
	- Role: Master's Proposal Defense Member, Masters - Thesis jury (Msc) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 09/2019
7. Zimmerman, Maëlle	- Role: PhD Oral Exam Chair, Doctorate - Thesis jury (PhD) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 08/2019
8. Tremblay, Pierre-Alexandre	- Role: PhD Oral Exam Chair, Doctorate - Thesis jury (PhD) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 10/2017
9. Thiongane, Mamadou	- Role: PhD Oral Exam Chair, Doctorate - Thesis jury (PhD) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 11/2016
10. Grogan, Sean	- Role: Master's Proposal Defense Member, Masters - Thesis jury (Msc) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 08/2016
11. Gemieux, Géraldine	Modèles et méthodes pour la planification de la récolte forestière - Role: PhD Oral Exam Chair, Doctorate - Thesis jury (PhD) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 12/2015
12. Chan, Wyean	- Role: PhD Oral Exam Chair, Doctorate - Thesis jury (PhD) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 12/2014
13. Sanjay Dominik, Jena	- Role: PhD Oral Exam Member, Doctorate - Thesis jury (PhD) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 07/2014
14. Côté, Jean-François	- Role: PhD Oral Exam Member, Doctorate - Thesis jury (PhD) - Université de Montréal, Canada - Started 02/2014
15. Gilbert, François	- Role: PhD Oral Exam Chair, Doctorate - Thesis jury (PhD) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 04/2012
16. Contardo, Claudio	- Role: PhD Oral Exam Chair, Doctorate

Student	Examination Detail
	- Thesis jury (PhD) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 11/2011
17. Ogoubi, Koffi Étienne	- Role: PhD Oral Exam Chair, Doctorate - Thesis jury (PhD) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 06/2011
18. Rezgui, Jihène	- Role: PhD Oral Exam Chair, Doctorate - Thesis jury (PhD) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 11/2010
19. Buist, Éric	- Role: PhD Oral Exam Chair, Doctorate - Thesis jury (PhD) - Université de Montréal, Canada, Informatique et Recherche Opérationnelle - Started 05/2009
20. Brière, Tony	Pseudo-random number generators for graphics processing units - Role: Capping Project Evaluator, Graduate intern - Internship Reports - Université de Montréal, Canada - 04/2022 - 05/2022

Research

Books and Other Related Productions

• Published / accepted / in press	
o Co-author	2

Peer-reviewed Research Publications

• Published / accepted / in press	
o 1st listed author / last author	4
o Co-author	32
• Revision requested	
o Co-author	1

Research Projects, Grants, Fellowships and Other Research Funding Sources

Research Chairs, Fellowships and Grants – Awarded (Ongoing)

1. Consolidating High-Frequency and Textual Data for Optimal Anomaly Detection in Derivative Markets

- Mathematics of Information Technology and Complex Systems (MITACS)

- Principal Applicant
- $15,000.00 CAD (15000 CAD)
- 08/2022 - 12/2022
- Number of Research Collaborators: Individual

2. Contribution à l'entraînement de modèles d'apprentissage statistique appliqué aux agents conversationnels en assurance

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Applicant
- $15,000.00 CAD (15000 CAD)
- 06/2022 - 11/2022
- Number of Research Collaborators: Individual

3. Second-order Hessian-free methods for statistical learning and stochastic optimization

- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Principal Investigator
- 04/2022 - 03/2027
- Number of Research Collaborators: Individual

4. Méthodes modernes en optimisation déterministe appliquée aux modèles paramétriques utilisés par Hydro-Québec en prévision de la demande

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Applicant
- $30,000.00 CAD (30000 CAD)
- 03/2022 - 12/2022
- Number of Research Collaborators: Individual

5. Modèles d'apprentissage automatique pour la prédiction des prix des transactions énergétiques du Parquet d'Hydro Québec

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Applicant
- $15,000.00 CAD (15000 CAD)
- 03/2022 - 07/2022
- Number of Research Collaborators: Individual

6. Développement de méthodes d'estimation de la demande d'électricité à court-terme.

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Applicant
- $15,000.00 CAD
- 06/2021 - 11/2021
- Number of Research Collaborators: Individual

7. Multivariate sequential data generator with long term, non-linear dependency

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Applicant
- $15,000.00 CAD
- 02/2021 - 05/2021
- Number of Research Collaborators: Individual

8. Market making for digital assets

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Applicant
- $22,000.00 CAD
- 01/2021 - 04/2021
- Number of Research Collaborators: Individual

9. Discount Pricing Recommendations

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Investigator
- $15,000.00 CAD
- 08/2020 - 12/2020
- Number of Research Collaborators: Individual

10. Optimization of sentence classification for insurance applications

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Investigator
- $15,000.00 CAD
- 08/2020 - 12/2020

- Number of Research Collaborators: Individual

11.

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Applicant
- $15,000.00 CAD (15000 CAD)
- 08/2020 - 12/2020
- Number of Research Collaborators: Individual

12. L'intelligence artificielle au service de l'industrie de l'assurance

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Investigator
- $15,000.00 CAD
- 07/2020 - 11/2020
- Number of Research Collaborators: Individual

13. Algorithme décisionnel intelligent pour systèmes énergétiques multiagents

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Applicant
- $25,000.00 CAD
- 04/2020 - 07/2020
- Number of Research Collaborators: Individual

14. Modeling order book dynamics

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Applicant
- $30,000.00 CAD (30000 CAD)
- 03/2020 - 11/2020
- Number of Research Collaborators: Individual

15. Algorithme décisionnel intelligent pour systèmes énergétiques

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Applicant
- $25,000.00 CAD

- 12/2019 - 03/2020
- Number of Research Collaborators: Individual

16. Machine Learning Strategies in the Physical North American Power Markets

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Investigator
- $13,334.00 CAD
- 05/2019 - 09/2019
- Number of Research Collaborators: Individual

17. Algorithme décisionnel intelligent pour systèmes de stockage énergétique

- Mathematics of Information Technology and Complex Systems (MITACS)
- Principal Applicant
- $15,000.00 CAD (15000 CAD)
- 01/2019 - 05/2019
- Number of Research Collaborators: Individual

18. Development of demand forecasting and inventory management models in the alcohol market

- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Principal Investigator
- $25,000.00 CAD
- 07/2018 - 12/2018
- Number of Research Collaborators: Individual

19. Extensions de l’algorithme du gradient stochastique pour l’estimation de modèles mixed logit

- IVADO
- Principal Investigator
- $2,500.00 CAD
- 06/2018 - 08/2018
- Number of Research Collaborators: Individual

20. NSERC CREATE Program on Machine Learning in Quantitative Finance and Business Analytics

- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Co-investigator
- $1,650,000.00 CAD
- 04/2018 - 03/2024
- Number of Research Collaborators: Individual

21. Développement de modèles alternatifs de risque de crédits avec des réseaux artificiels de neurones

- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Principal Investigator
- $25,000.00 CAD
- 03/2018 - 09/2018
- Number of Research Collaborators: Individual

22. Application des méthodes d'apprentissage machine au problème d'inventaire dans les stratégies algorithmiques à haute fréquence: Une approche via un générateur de flux artificiel d'ordres.

- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Co-investigator
- $26,284.00 CAD
- 09/2017 - 08/2019
- Number of Research Collaborators: Individual

23. Application des méthodes d'apprentissage machine au problème d'inventaire dans les stratégies algorithmiques à haute fréquence: Une approche via un générateur de flux artificiel d'ordres.

- National Bank of Canada
- Co-investigator
- $35,000.00 CAD
- 09/2017 - 08/2019
- Number of Research Collaborators: Individual

24. Application des méthodes d'apprentissage machine au problème d'inventaire dans les stratégies algorithmiques à haute fréquence: Une approche via un générateur de flux artificiel d'ordres.

- PROMPT-Québec
- Co-investigator
- $31,582.00 CAD
- 09/2017 - 08/2019
- Number of Research Collaborators: Individual

25. On the exploitation of uncertainty in exact and approximate optimization

- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Principal Investigator
- $120,000.00 CAD
- 04/2017 - 03/2022
- Number of Research Collaborators: Individual

26. Towards new solution techniques in mathematical programming with scenarios

- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Principal Investigator
- $105,000.00 CAD
- 04/2012 - 03/2017
- Number of Research Collaborators: Individual

Research Chairs, Fellowships and Grants – Awarded (Completed)

1. Modeling and simulation of a hydroelectricity generation network

- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Co-applicant
- $4,500.00 CAD
- 05/2015 - 08/2015
- Number of Research Collaborators: Individual

2. Simultaneous Water and Energy Network Optimization in the Canadian Pulp and Paper Industry

- Fonds Québécois de la Recherche sur la Nature et les Technologies (FQRNT)
- Principal Investigator

- $30,000.00 CAD
- 01/2010 - 08/2010
- Number of Research Collaborators: Individual

3. Modélisation stochastique et optimisation pour la tarification des passagers en transport aérien et ferroviaire

- Fonds Québécois de la Recherche sur la Nature et les Technologies (FQRNT)
- Co-investigator
- $158,760.00 CAD
- 05/2008 - 04/2011
- Number of Research Collaborators: Individual

4. Développement de nouveaux algorithmes adaptatifs en programmation stochastique nonlinéaire nonconvexe et en estimation de modèles de choix discrets

- Fonds Québécois de la Recherche sur la Nature et les Technologies (FQRNT)
- Principal Investigator
- $40,000.00 CAD
- 05/2008 - 04/2010
- Number of Research Collaborators: Individual

5. Development of innovative techniques in nonlinear and stochastic programming and applications in discrete choice theory.

- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Principal Investigator
- $85,000.00 CAD
- 04/2007 - 03/2012
- Number of Research Collaborators: Individual

Publications

Books and Other Related Productions

Book Chapters (2)	Status	Refereed
1. Chavez Aquino R, Bastin F, Benazzouz M, Kharrat M. (2022, April). Monte Carlo methods for pricing American Options. In Botev Z, Keller A, Lemieux C, Tuffin B (Eds.), Advances in Modeling and Simulation.	Accepted	Yes

Book Chapters (2)	Status	Refereed
Springer.		
2. Morin L R*, Bastin F, Frejinger E, Trépanier M. (2019). Modelling truck route choice in an urban area using a recursive logit model and gps data. In Awasthi A (Ed.), Sustainable City Logistics Planning: Methods and Applications. Volume 3 (pp. 103-122). Hauppauge, New York: Nova Science.	Published	Yes

Peer Reviewed Productions

Journal Articles (30)	Status
1. Kharrat, Mohamed & Bastin, Fabian. (2022). Continuation value computation using Malliavin calculus under general volatility stochastic process for American option pricing. Turkish Journal of Mathematics, 46(1), 71--86. DOI: 10.3906/mat-2105-6	Published
2. Khassiba, Ahmed, Cafieri, Sonia, Bastin, Fabian, Mongeau, Marcel & Gendron, Bernard. (2022). Two-stage stochastic programming models for the extended aircraft arrival management problem with multiple pre-scheduling points. Transportation Research Part C.	Accepted
3. *Ta, T A, Chan, W, Bastin, F & L'Ecuyer, P. (2021). A Simulation-based Decomposition Approach for Two-stage Staffing Optimization in Call Centers under Arrival Rate Uncertainty. European Journal of Operational Research, 293(3), 966-979.	Published
4. *Ta, T A, Mai, T, Bastin, F & L'Ecuyer, P. (2021). On a multistage discrete stochastic optimization problem with stochastic constraints and nested sampling. Mathematical Programming, 190(1), 1--37.	Published
5. *Khassiba, Ahmed, Bastin, Fabian, Gendron, Bernard, Cafieri, Sonia & Mongeau, Marcel. (2020). Two-stage stochastic mixed-integer programming with chance constraints for extended aircraft arrival management. Transportation Science, 54(4), 897-919.	Published
6. *Khassiba, A, Bastin, F, Gendron, B, Cafieri, S & Mongeau, M. (2019). Extended Aircraft Arrival Management under Uncertainty: a computational study. Journal of Air Transportation, 27.	Published
7. Kaushik, K, Cirillo, C & Bastin, F. (2019). On Modelling Human Population Characteristics with Copulas. Procedia Computer Science, 151.	Published
8. Cirillo, C, Bastin, F & *Hetrakul, P. (2018). Dynamic Discrete Choice Model for Railway Ticket Cancellation and Exchange Decisions. Transportation Research Part E, 110.	Published
9. *Mai, T, Bastin, F & Frejinger, E. (2018). A Decomposition Method for Estimating Recursive Logit Based Route Choice Models. EURO Journal on Transportation and Logistics, 7.	Published
10. Bastin, F, *Liu, Y, Cirillo, C & *Mai, T. (2018). Transferring Time-Series Discrete Choice to Link-Based Route Choice in Space : Estimating Vehicle-Type Preference Using Recursive Logit Model. Transportation Research Record, 2672.	Published
11. *Mai, T, Frejinger, E, Fosgerau, M & Bastin, F. (2017). A dynamic programming approach for quickly estimating large-scale MEV models. Transportation Research Part B, 98.	Published
12. *Mai, T, Bastin, F & Frejinger, E. (2017). On the similarities between random regret minimization and mother logit: The case of recursive route choice models. Journal of Choice Modelling, 23.	Published

Journal Articles (30)	Status
13. Cirillo, C, *Xu, R & Bastin, F. (2016). A Dynamic Formulation for Car Ownership Modeling. Transportation Science, 50.	Published
14. *Nasri, M & Bastin, F. Marcotte P. (2015). Quantifying the social welfare loss in moral hazard models. European Journal of Operational Research, 245.	Published
15. *Carpentier, PL, Gendreau, M & Bastin, F. (2015). Managing Hydroelectric Reservoirs over an Extended Horizon using Benders Decomposition with a Memory Loss Assumption. IEEE Transactions on Power Systems, 30.	Published
16. *Tarzanagh, D A, Peyghami, M R & Bastin, F. (2015). A New Nonmonotone Adaptive Retrospective Trust Region Method for Unconstrained Optimization Problems. Journal of Optimization Theory and Applications, 167.	Published
17. *Mai, T, Frejinger, E & Bastin, F. (2015). A misspecification test for logit based route choice models. Economics of Transportation, 4.	Published
18. *Carpentier, PL, Gendreau, M & Bastin, F. (2013). Midterm Hydro Generation Scheduling Under Uncertainty Using the Progressive Hedging Algorithm. Water Ressources Research, 49.	Published
19. *Munger, D, L'Ecuyer, P, Bastin, F, Cirillo, C & Tuffin, B. (2012). Estimation of the Mixed Logit Likelihood Function by Randomized Quasi-Monte Carlo. Transportation Research Part B, 46.	Published
20. Bastin, F & Cirillo, C. (2012). Discrete choice estimators properties for finite population and simulation sample sizes. Transportation Research Record, 2302.	Published
21. Bastin, F. Cirillo C. (2011). On the information matrix in mixed logit models estimation. Transportation Research Record, 2254.	Published
22. Bastin, F, *Malmedy, V, *Mouffe, M, Toint, Ph L & *Tomanos, D. (2010). A Retrospective Trust-Region Method for Unconstrained Optimization. Mathematical Programming, 123.	Published
23. Bastin, F, Cirillo, C & Toint, Ph L. (2010). Formulation and solution strategies for nonparametric nonlinear stochastic programs, with an application in finance. Optimization, 59.	Published
24. Bastin, F, Cirillo, C & Toint, Ph L. (2010). Estimating non-parametric random utility models, with an application to the value of time in heterogeneous populations. Transportation Science, 44.	Published
25. Bastin, F & Cirillo, C. (2010). Reducing simulation bias in mixed logit model estimation. Journal of Choice Modelling, 3.	Published
26. Ettema, D, Bastin, F, Polak, J & Ashiru, O. (2007). Modelling the joint choice of activity timing and duration. Transportation Research Part A, 41.	Published
27. Bastin, F., Cirillo, C. & Toint, Ph. L. (2006). An adaptive Monte Carlo algorithm for computing mixed logit estimators. Computational Management Science, 3.	Published
28. Bastin, F., Cirillo, C. & Toint, Ph. L. (2006). Application of an adaptive Monte Carlo algorithm to mixed logit estimation. Transportation Research Part B, 40.	Published
29. Bastin, F., Cirillo, C. & Toint, Ph. L. (2006). Convergence theory for nonconvex stochastic programming with an application to mixed logit. Mathematical Programming, 108.	Published
30. Bastin, F, Cirillo, C & Hess, S. (2005). Evaluation of advanced optimisation methods for estimating mixed logit models. Transportation Research Record, 1921.	Published

Conference Publications (8)	Status
1. Ta T A, Mai T, Bastin F, L'Ecuyer P. (2022). A Logistic Regression and Linear Programming Approach for Multi-skill Staffing Optimization in Call Centers. In Winter Simulation Conference.	Submitted
2. Kaushik K*, Cinzia C, Bastin F. (2019). On Modelling Human Population Characteristics with Copulas. In The 10th International Conference on Ambient Systems, Networks and Technologies (ANT 2019) / The 2nd International Conference on Emerging Data and Industry 4.0 (EDI40 2019) / Affiliated Workshops (p. 210-217) Elsevier.	Published
3. Morin L R*, Bastin F, Frejinger E, Trepanier M. (2016). A GPS-based recursive logit model for truck route choice in urban area. In Transportation Research Board 96th Annual Meeting.	Published
4. Chan W*, Ta T A*, L'Ecuyer P, Bastin F. (2016). Two-stage chance-constrained staffing with agent recourse for multi-skill call centers. In Winter Simulation Conference.	Published
5. Ta T A*, Pierre L'ecuyer P, Bastin F. (2016). Staffing optimization with chance constraints for emergency call centers. In 11th International Conference on Modeling, Optimization and Simulation.	Published
6. Chan W*, Ta T A*, L'Ecuyer P, Bastin F. (2014). Chance-Constrained Staffing with Recourse for Multi-Skill Call Centers with Arrival-Rate Uncertainty. In Winter Simulation Conference (p. 4103-4104).	Published
7. Bastin F. (2013). Bias evaluation and reduction for sample-path optimization. In Eighth IMACS Seminar on Monte Carlo Methods (p. 47-57).	Published
8. Ta T A, Mai T, Bastin F, L'Ecuyer P. (2022, December). A Logistic Regression and Linear Programming Approach for Multi-skill Staffing Optimization in Call Centers. In Winter Simulation Conference.	Revision Requested

Non-Peer Reviewed Productions

Conference Publications (1)	Status
1. Bastin F, Chugunova M, Karagul B Z, Morales M, Regnard N, Wang Y, Zoghalchi F. (2017). Arbitrage Strategy Between Next-Day Delivery Prices and Real-Time Delivery Prices of Electricity Megawatts on the Physical California Market. In Eighth Montréal Industrial Problem Solving Workshop (p. 93-104) CRM.	Published

Reports (7)
1. (2020). Autonomous control in smart buildings: A deep reinforcement learning approach.
2. (2018). Problem-driven scenario trees in multistage stochastic optimization: An illustration in option pricing.
3. (2018). The figure of demerit: a quality measure for the discretization of probability distributions in multistage stochastic optimization.
4. (2016). Penalty Parameter Update Strategies in Progressive Hedging Algorithm.
5. (2014). Analyse de données Otto View, CargoM, Rapport d'étude.
6. (2014). On Optimization Algorithms for Maximum Likelihood Estimation.
7. (2013). Optimal scenario set partitioning for multistage stochastic programming with the progressive hedging algorithm.

Service to the University

Detail of Contributions / Committees / Groups

Level	Contribution Description	Contribution Type	Dates
1. Department	Membre du comité de programme du Département d'Informatique et de Recherche Opérationnelle		Started 09/2017
2. Department	Responsable de la Maîtrise et du DESS en Finance Mathématique et Computationnelle		Started 06/2017
3. Department	Membre du comité d'évaluation de l'enseignement		03/2018 - 08/2019
4. Faculty	Membre du comité de nomination du directeur du département d'informatique et recherche opérationnelle		11/2016 - 05/2017
5. Department	Membre du comité des études de la Maîtrise et du DESS en Finance Mathématique et Computationnelle		06/2015 - 05/2017
6. Faculty	Co-organisateur de l'École d'Été "Dynamic Discrete Choice Models : Econometric Models and Operations Research Methods", CIRRELT		06/2015 - 06/2015
7. Faculty	Membre du comité d'auto-évaluation du programme de Maîtrise en Finance Mathématique et Computationnelle		09/2013 - 05/2018
8. Department	Responsable de la Maîtrise et du DESS en Finance Mathématique et Computationnelle		06/2011 - 05/2015

Recognition and Service to the University

Presentations, Conferences, Scientific or Professional Events

Invited Presenter for Presentations, Conferences, Scientific or Professional Events

Keynote	Presentation Details
No	1. Digital Asset Market Structure and Liquidity Modeling - IVADO Zoom sur l'intelligence numérique collaborative - Zooming in on Collaborative Digital Intelligence - Main Audience: Knowledge User (Local) - Co-Presenters: Hubbell, Austin - 2021, Montréal
No	2. Problem-driven scenario trees in multistage stochastic optimization - International Congress on Industrial and Applied Mathematics - (International) - Co-Presenters: Keutchayan J*, Gendreau M - 2019, Valencia
No	3. On a two-stage stochastic optimization problem with stochastic constraints

Keynote	Presentation Details
	- 23rd International Symposium on Mathematical Programming - Main Audience: Researcher (International) - Co-Presenters: Ta T A, L'Ecuyer P - 2018, Bordeaux
No	4. A learning-based approach for multi-skill staffing optimization in call centers - 23rd International Symposium on Mathematical Programming - Main Audience: Researcher (International) - Co-Presenters: Mai T, Ta T A, L'Ecuyer P - 2018, Bordeaux
No	5. Exploitation of random noise in simulated annealing - 21st Conference of the International Federation of Operational Research Societies - Main Audience: Researcher (International) - Co-Presenters: Bouttier C. - 2017, Quebec
No	6. The future of trading - I5 Day - Main Audience: Knowledge User (Local) - Co-Presenters: Brisebois A, Leung B, Sabourin JF, Bergeron P - 2017, Montreal
No	7. Comparing Regret Minimization and Utility Maximization for Route Choice Recursive Logit Models - 58th CORS Annual Conference - Main Audience: Researcher (International) - Co-Presenters: Mai T, Frejinger E - 2016, Banff, AB
No	8. On the use of the information matrix in Discrete Choice Modeling - NOW 2015 - Main Audience: Researcher (International) - Co-Presenters: Frejinger E, Mai T, Toulouse M - 2015, La Rochelle
No	9. Combining Hessian Approximations in Estimation Problems - CORS/INFORMS International Meeting - Main Audience: Researcher (International) - Co-Presenters: Cirillo C, Mai T, Toulouse M - 2015, Montreal. QC
No	10. Application de l'algorithme de couverture progressive pour la planification à moyen terme de la production hydroélectrique - Séminaire SPOT, ENSEEIHT - Main Audience: Researcher (Local) - 2015, Toulouse
No	11. Introduction to stochastic dynamic programming - Summer School "New Paradigms in Revenue Management: Methods and Applications",

Keynote	Presentation Details
	National Transportation Center, University of Maryland - Main Audience: Researcher (Local) - 2015, College Park, MD
No	12. Mixed recursive logit models for route choice analysis - International Symposium on Mathematical Programming - (International) - Co-Presenters: Mai T, Frejinger E - 2015, Pittsburgh, PA
No	13. Sur la matrice d'information de Fisher dans le calcul du maximum de vraisemblance, avec des applications en modèles de choix discrets - MIAT Unit Seminars, INRA - Main Audience: Researcher (Local) - 2015, Toulouse
No	14. A L-shaped method for mid-term hydro scheduling under uncertainty - XIII International Conference on Stochastic Programming - Main Audience: Researcher (International) - Co-Presenters: Carpentier PL, Gendreau M - 2013, Bergamo
No	15. On the combination of Hessian approximations for data estimation - 21th International Symposium on Mathematical Programming - Main Audience: Researcher (International) - Co-Presenters: Mai T, Toulouse M - 2012, Berlin

Presenter for Presentations, Conferences, Scientific or Professional Events

Type	Competitive?	Presentation Details
	No	1. Dynamic discrete choice model for railway ticket cancellation and exchange decisions - 2018 INFORMS Revenue Management and Pricing Section Conference - Main Audience: Researcher (International) - Co-Presenters: Cirillo C, Hetrakul P - 2018, Toronto
	No	2. A two-stage stochastic model for scheduling aircraft arrivals under uncertainty - Optimization Days - Main Audience: Researcher (International) - Co-Presenters: Khassiba A, Gendron B, Cafieri S, Mongeau M - 2018, Montreal
	No	3. Optimal scenario set partitioning for multistage stochastic programming using the progressive hedging algorithm - SIAM Conference on Optimization

Type	Competitive?	Presentation Details
		- (International) - Co-Presenters: Carpentier PL, Gendreau M - 2014, San Diego. CA
	No	4. Retrospective trust-region for data estimation - 26th European Conference on Operational Research – INFORMS - Main Audience: Researcher (International) - Co-Presenters: Mai T, Toulouse M - 2013, Roma
	No	5. Dynamic Discrete Choice Model for Railway Ticket Cancellation and Exchange Behavior - 10th International Conference on Computational Management Science - Main Audience: Researcher (International) - Co-Presenters: Hetrakul P, Cirillo C - 2013, Montreal, QC
	No	6. Discrete choice estimators properties for finite population and simulation sample sizes - Transportation Research Board Annual Meeting - (International) - Co-Presenters: Cirillo C - 2012, Washington D.C.
	No	7. Midterm Hydro Generation Scheduling Under In?ow Uncertainty Using the Progressive Hedging Algorithm - 54th Annual conference of the Canadian Operational Research Society and 10th International Conference on Multiple Objective - Main Audience: Researcher (National) - Co-Presenters: Carpentier PL, Gendreau M - 2012, Niagara Falls, ON
	No	8. Modelling Multivariate Distributions in Non-Parametric Random Coefficients Logit Models - 13th Conference of the International Association for Travel Behavior Research - Main Audience: Researcher (International) - Co-Presenters: Cirillo C - 2012, Toronto, ON
	No	9. Bias Evaluation and Reduction for Sample-path Optimization - Eigth IMACS Seminar on Monte Carlo Methods - (International) - 2011, Borovets
	No	10. On Bias Reduction in Stochastic Nonlinear Programming - INFORMS Annual Meeting - (International) - 2011, Charlotte, NC

Type	Competitive?	Presentation Details
	No	11. On bias reduction in stochastic nonlinear programming - Annual Conference of the Canadian Operational Research Society - Main Audience: Researcher (National) - 2011, St John’s, NL
	No	12. On bias reduction in stochastic nonlinear programming - 12th Conference on Stochastic Programming - Main Audience: Researcher (International) - 2010, Halifax, NS

Event Organization / Administration

Name	Type	Role	Dates
1. Optimization under uncertainty	Workshop International	Co-organisateur	09/2021 - 10/2021
2. 15th EUROPT Workshop on Advances in Continuous Optimization	Workshop International	Co-organizer	07/2017 - 07/2017
3. International Conference on Monte Carlo Methods and Applications	Conference International	Member of the Program Committee	07/2017 - 07/2017
4. CORS/INFORMS 2015	Conference International	Invited Sessions Co-Chair	06/2015 - 06/2015
5. Summer School on Dynamic Discrete Choice Models: Econometric Models and Operations Research Methods	Course Local	Co-organizer	06/2015 - 06/2015

Editorial Boards for Journals, Thesis / Dissertation Juries (Outside the University), Accreditation Committees, Peer Review Committees of Funding Organizations, Referee for a Journal or Other Forms of Consultation and University Expertise

Committee Member

Role	Committee Name	Start Date	End Date
1. Committee Member	Comité d’évaluation des bourses	12/2019	
2. Committee Member	Journal of Industrial Management and Optimization Editorial Board	11/2014	
3. Committee Member	Société Canadienne de Recherche Opérationnelle, Section de Montréal	02/2009	
4. Committee Member	Membre du comité de bourses du CIRRELT	11/2018	12/2020

Journal Review Activities

Journal	No. of Work Reviewed	Year

Journal	No. of Work Reviewed	Year
1. AIMS Mathematics	1	Started 2022
2. SIAM Journal on Optimization		Started 2021
3. Operations Research Letters	1	Started 2021
4. IEEE Transactions on Services Computing		Started 2021
5. Computers & Industrial Engineering	2	Started 2020
6. Neural Computing and Applications		Started 2020
7. Travel Behaviour and Society	1	Started 2020
8. Transportation Research Part C	1	Started 2020
9. Journal of Choice Modelling		Started 2019
10. Transportation		Started 2019
11. Optimization Methods and Software		Started 2018
12. The Econometrics Journal		Started 2018
13. Numerical Algorithms		Started 2018
14. IEEE Transactions on Power Systems		Started 2018
15. Journal of Global Optimization		Started 2018
16. Mathematical Programming	8	Started 2017
17. Transactions on Mathematical Software		Started 2016
18. Management Science		Started 2016
19. Transportation Research Part B	4	Started 2016
20. Journal of Optimization Theory and Applications		Started 2015
21. Journal of Business & Economic Statistics		Started 2015
22. Journal of Inequalities and Applications		Started 2014
23. Soft Computing		Started 2014
24. Mathematics of Computation		Started 2014
25. Applied Numerical Mathematics	1	Started 2014
26. Applied Soft Computing	8	Started 2013
27. Transportation Science		Started 2012
28. International Journal of Revenue Management		Started 2012
29. Journal of Industrial Management and Optimization		Started 2012
30. Transactions on Image Processing		Started 2011
31. Transportmetrica		Started 2011
32. Operations Research		Started 2010
33. 4OR		Started 2010
34. Computational Optimization and Applications		Started 2010
35. Computational Management Science		Started 2009
36. European Journal of Operational Research	4	Started 2008
37. Information Sciences		Started 2006

Supervision of Graduate Students (Excluding UdeM)

Student	Supervision Detail
Ma, Chiyu (Completed)	1. Random Search in Metaheuristics and Derivative-free Optimization - Role: Principal Supervisor, Undergraduate project - Nankai University
Shi-Garrier, Loic (Completed)	2. Hessian-free second-order methods for statistical learning - Role: Principal Supervisor, Masters - École Nationale d'Aviation Civile
Keutchayan, Julien (Completed)	3. New methods for generating scenario trees - Role: Co-Supervisor, Doctorate - École Polytechnique de Montréal
Tao, Manyuan (Completed)	4. Lanczos Method Algorithm for Solving the Trust-Region Subproblem - Role: Principal Supervisor, Undergraduate project - Xiamen University
Zimmermann, Maëlle (Completed)	5. A new approach for urban freight transport policy-oriented modeling - Role: Co-Supervisor, Masters - EPFL
Mazoyer, Anne-Laure (Completed)	6. E?laboration d’un simulateur de la produc- tion d’Hydro-Que?bec - Role: Principal Supervisor, Masters - Institut national des Sciences appliquées de Rouen
Saintemarie, Blandine (Completed)	7. Éaboration d’un simulateur de la production d’Hydro-Québec - Role: Principal Supervisor, Undergraduate project - Institut national des Sciences appliquées de Rouen
Carpentier, Pierre-Luc (Completed)	8. Méthodes de décomposition pour la planification à moyen terme de la production hydroélectrique sous incertitude. - Role: Co-Supervisor, Doctorate - Polytechnique Montréal

Postgraduate Examination Activities (Excluding UdeM)

Student	Examination Activity Detail
Mbeutcha, Yves Alain	1. - Role: PhD Oral Exam Member, Doctorate - Thesis jury (PhD) - École Polytechnique de Montréal, CanadaMathématiques et Génie Industriel - Started 12/2020
Karimi, Akbar	2. - Role: PhD Oral Exam Member, Doctorate - Thesis jury (PhD) - École Polytechnique de Montréal, CanadaMathématiques et Génie Industriel - Started 08/2019

Student	Examination Activity Detail
El Byaz, Ranya	3. - Role: Master's Proposal Defense Member, Masters - Thesis jury (Msc) - Université Laval, Canada - Started 06/2018
Léveillé, Nicolas	4. - Role: Master's Proposal Defense Member, Masters - Thesis jury (PhD) - HEC Montréal, Canada - Started 05/2018
Piña Fulano, Jasson	5. - Role: PhD External Examiner, Doctorate - Thesis jury (PhD) - Université Laval, CanadaGénie Civil et Génie des Eaux - Started 12/2017
Gauvin, Charles	6. - Role: PhD Oral Exam Member, Doctorate - Thesis jury (PhD) - École Polytechnique de Montréal, CanadaMathématiques et Génie Industriel - Started 05/2017
Tremblay, Jean-Michel	7. - Role: PhD External Examiner, Doctorate - Thesis jury (PhD) - University of Maryland at College Park, United StatesCivil and Environmental Engineering - Started 04/2016
Wang, Xinchang	8. - Role: PhD Oral Exam Member, Doctorate - Thesis jury (PhD) - Georgia Institute of Technology, United StatesIndustrial and System Engineering - Started 05/2015
Hosseinalifam, Morad	9. - Role: PhD Oral Exam Member, Doctorate - Thesis jury (PhD) - École Polytechnique de Montréal, CanadaMathémiques et Génie Industriel - Started 08/2014
Azadeh, Shadi Sharif	10. - Role: PhD Oral Exam Member, Doctorate - Thesis jury (PhD) - École Polytechnique de Montréal, CanadaMathématiques et Génie Industriel - Started 08/2013

Student	Examination Activity Detail
Towhidi, Mehdi	11. - Role: PhD Oral Exam Member, Doctorate - Thesis jury (PhD) - École Polytechnique de Montréal, CanadaMathématiques et Génie Industriel - Started 04/2013
Dang, Cong-Kien	12. - Role: Master's Oral Exam Member, Masters - Thesis jury (Msc) - École Polytechnique de Montréal, CanadaMathématiques et Génie Industriel - Started 06/2012
Xu, Renting	13. - Role: PhD External Examiner, Doctorate - Thesis jury (PhD) - University of Maryland at College Park, United StatesCivil and Environmental Engineering - Started 11/2011
Zokaee, Shiva	14. Empirical Study of Out-of-sample Performance of Sparse Mean-Variance Portfolio Optimization - Role: Master's Oral Exam Member, Masters - Thesis jury (Msc) - École Polytechnique de Montréal, CanadaMathématiques et Génie Industriel - 04/2021 - 04/2021

Research Project Funding Application Assessment Activities

Role	Funding Organization	Applications	Dates
1. External Reviewer	National Science Foundation	1	Started 12/2020
2. Committee Member	FRQNT		Started 01/2020
3. External Reviewer	CRNSG	2	Started 12/2018
4. External Reviewer	MITACS	2	Started 07/2018
5. External Reviewer	Research Council Romania	20	Started 07/2011

Academic, Scientific, and / or Professional Recognition Outside the Community

Recognitions

Type	Description	Dates
1. Prize / Award	Prix "Transport de marchandises", Association Québécoise des Transports, attribué au CIRRELT et à CargoM pour le projet "Measuring and improving fluidity of the transportation by trucks" (Frejinger, E., Morin, L.R.,	Started 06/2017

Type	Description	Dates
	Bastin, F. et Trépanier, M.)	