# **OLIVIER CÔTÉ**

Curriculum vitae

# CONTACT INFORMATION

Québec, QC, Canada

+1 (581) 305-6367

olivier.cote.12@ulaval.ca

in in/olivier-cote-act

olicoside.github.io

SKILLS	_
R	7 years +
Python	2 years +

## **LANGUAGES**

French Mother tongue

English Advanced

#### **EDUCATION**

PhD in Actuarial Science (GPA: 4.17/4.33)

2023 -

Université Laval

My thesis is on fairness in insurance in collaboration with one of the largest P&C insurer in Canada. I am supervised by Prof. Marie-Pier Côté (Université Laval) and Prof. Arthur Charpentier (Université du Québec à Montréal).

Master's degree in Actuarial Science (GPA : 4.24/4.33) Université Laval	2021 - 2023
Bachelor's degree in Actuarial Science (GPA : 4.17/4.33) Université Laval	2018 - 2021
Natural Sciences	2015 - 2017

Cégep de Lévis

### **PUBLICATIONS**

Côté, O., Côté, M.-P., and Charpentier, A. (2025b). A scalable toolbox for exposing indirect discrimination in insurance rates. *Submitted and under peer review (not publicly available)* 

Côté, O., Côté, M.-P., and Charpentier, A. (2025a). A fair price to pay: Exploiting causal graphs for fairness in insurance. *Journal of Risk and Insurance*, 92:33–75

Côté, M.-P., Côté, O., and Charpentier, A. (2024). Selection bias in insurance: why portfolio-specific fairness fails to extend market-wide. *Available at SSRN 5018749* 

### DIVERSITY, EQUITY, AND INCLUSION EDUCATION

Get Comfortable Being Uncomfortable: Dialogue About Favoritism and Fairness	2025
Canadian Statistical Sciences Institute	
Let's talk about race and collective responsibility	2024
Canadian Statistical Sciences Institute	
Acting as a sentinel for the prevention of suicide	2023
Centre de prévention du suicide du Québec workshop	
Addressing Conflicts Related to Bias, Privilege, and Identity in the STEM Fields	2022
CANSSI and Academic Impressions workshop	

#### **PROFESSIONAL EXAMS**

Exam 6C Casualty Actuarial Society	written in 2025
Professionalism Workshop Canadian Institute of Actuaries	2025
Online Course 2 Casualty Actuarial Society	2024
MAS-I, MAS-II, Exam 5 and Online Course 1 Casualty Actuarial Society	2020 - 2022
Exam P, FM and IFM Society of Actuaries and Canadian Institue of Actuaries (credits)	2019- 2020

#### **WORK EXPERIENCES**

Course lecturer 2022 - 2023

Université Laval

- · Linear Models in Actuarial Science (mandatory undergraduate course, 3 credits)
  - Fall 2022, 88 students enrolled
- · Statistical Learning in Actuarial Science (mandatory undergraduate course, 3 credits)
  - Winter 2023, 54 students enrolled
- \*Awards included: Faculty of Science and Engineering Teaching Star (2022-2023).

#### American football coach

2019 - present

2019 - 2024

Falcons of Cégep de Lévis

American football coach for different teams since 2012 (10 years). I am coaching collegiate D2 for Cégep de Lévis since 2019 :

- · Tight ends and Fullbacks coach (2019-present)
- · Supervisor for a bachelor's degree intern in sports intervention (2023)
- \*Awards included: Coaching Staff of the year 2023 and 2024. Coaching Staff Sportsmanship Award 2022 (D1) and 2023 (D2).

#### **Teaching assistant**

Université Laval

Teaching assistants on several occasions:

- Evaluator for actuarial student internships (1 time)
  Probabilistic Analysis of Actuarial Risks (3 times)
- · Statistical Learning in Actuarial Science (5 times)
- · Linear Models in Actuarial Science (1 time)

Actuarial intern 2019 - 2021

**Desjardins General Insurance Group** 

Intern for Property Ratemaking (2019), Business analysis (2020 and 2021), and Research (2021).

Compilation : April 23, 2025

#### SCHOLARSHIPS AND AWARDS

Postgraduate Scholarships - Doctoral 2025 **Natural Sciences and Engineering Research Council of Canada** This competitive scholarship that amounts to 120 000\$ on three years. 2024 **Hickman Scholars Program Society of Actuaries** A highly competitive international scholarship that amounts to 20 000 USD per year (not guaranteed). **Doctoral Training Scholarships** 2024 Fonds de recherche du québec (Nature et techologies) This competitive scholarship that amounts to 100 000\$ on four years. 2024 Project partnership fund **MITACS** This fund was negociated with an industrial partner that amounts to 84 000\$ on three years. **Doctorate attraction grant Florent Toureille** Chaire d'actuariat de l'Université Laval This competitive scholarship based on leadership and excellence amounts to 30 000\$ on three years. **Leadership and Engagement Scholarship** 2023 Université Laval This competitive sports leadership scholarship amounts to 30 000\$ on three years. 2023 Charles Brindamour Graduate Scholarship for Excellence **Charles Brindamour (Intact CEO)** Competitive scholarship based on excellence amounts to \$10 000 CAD. 2022 François-Laviolette Scholarship François-Laviolette Scholarship fund Competitive scholarship to promoting the development of responsible AI. This award amounts to \$7 500 CAD. Grant of attraction to the Master's 2021 Chaire d'actuariat de l'Université Laval Grant recognizing the research potential for future Master's thesis students, amount of \$15,000 CAD. **CAS Trust Scholarship** 2021 **Casualty Actuarial Society** A highly competitive international scholarship competition that amounts to \$2 500 USD.

Alexander-Graham-Bell Scholarship

2021

**Natural Sciences and Engineering Research Council** 

Competition for the 2021-2022 cohort of graduate scholarships that amounts to \$17 500 CAD.

Lieutenant-Governor's Medal

2018

Cégep de Lévis

Awarded to a student whose involvement and academic results are distinguishable.

## **ACADEMIC COMMUNICATIONS**

Perspective causale sur les discriminations dans les modèles prédictifs en assurance Institut intelligence et données Guest presenter to over 100 people from academia. (Audience: academics)
A Fair price to pay: exploiting causal graphs for fairness in insurance  2024  27th International Congress on Insurance: Mathematics and Economics  Academic presentation in Chicago, IL, United States (Audience: academics)
A Fair price to pay: exploiting causal graphs for fairness in insurance Workshop on fairness and discrimination in insurance Guest presenter to over 60 people from academia, practitionners and regulators. (Audience: general)
Perspective causale sur la discrimination indirecte en assurance générale  Autorité des marchés financiers  Presentation to decision-makers at Québec's financial autority. (Audience: decision-makers)
The Fairness in Insurance Enigma: Exploring the Maze of Regulation 7th Ontario-Québec Workshop in Insurance Mathematics Poster in an event where over 70 academics were present. (Audience: academics)
Équité et discrimination en assurance générales 2023 Desjardins groupe assurances générales Presentation to $\approx 40$ actuaries and data scientists (Audience: End-users)
Équité et discrimination en assurance générales Intact Financial Corporation Presentation to CEO, CLO and CDO of Intact Financial Corporation. (Audience: decision-makers)
Causal inference and Fairness in Insurance Pricing Insurance Data Science Conference Presenter for Insurance Data Science Conference Insurance
Équité et discrimination en assurance générales 2023 Desjardins groupe assurances générales Presentation to $\approx 40$ actuaries (Audience: end-users)
Fairness in Insurance : Overview of discrimination-free models  Quantact Summerday 2022  Guest presenter in Concordia University. (Audience: academics)
Équité en assurance : revue des modèles non discriminatoires  Workshop on Fairness and Discrimination in Insurance  Guest presenter to over 50 people from academia and industry (Audience: general)
PUBLIC OUTREACH
Pour une intelligence artificielle équitable en assurance Université Laval News I collaborated for a scientific communication article . (Audience: General Public)
Perspective causale sur la discrimination indirecte en assurance générale  Institut Intelligence et données  4th research competition on data intelligence. ≈ 50 graduate students (Audience: general)
Perspective causale sur la discrimination indirecte en assurance générale  Institut de valorisation des données  I presented a my research during IVADO Digital Future Day 2024. Over 250 people. (Audience: general)

Compilation : April 23, 2025

Discrimination injustifiée en assurance générale: une perspective causale	2023
Faculty of Science and Engineering Presentation during the Research Day in Science and Engineering (Audience: General)	
Tresentation during the Nesearch Day in Science and Engineering (Addience: deneral)	
L'IA pour calculer le prix de votre assurance auto: poétique ou pas éthique?	2023
Big Data Research Center Presentation during the event <i>lightning talks 180</i> (Audience: General)	
*Awards included: Public's choice award	
Artificial intelligence to prevent unfair discrimination in auto insurance	2023
IVADO	
I authored an 800-word scientific communication article . (Audience: General)	
L'avenir à travers une boule de cristal mathématique : Le travail d'un actuaire	2023-2025
Cégep de Lévis	
Guest presenter for CEGEP students. (Audience: Students)	
How to improve fairness in insurance? Towards more responsible pricing	2022
Actulab 2022	
Problem-solving workshops. (Audience: End-users)  'Awards included: Coup de coeur Entrepreunariat ULaval award (1000 CAD)	
Gala of Excellence	2022
Pointe-Lévy High School	
Guest of honor for the Student-Athlete Excellence Gala. (Audience: Students)	
COMMITTEES	
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Actuarial Science Graduate Program Committee of Université Laval	2022 - present
Voting member of the Committee	2022 - present
Big Data Research Center of Université Laval	2022 - 2025
Student voting member of the Committee	2022 2023
Actuarial Science Student Investment Fund of Université Laval	2021 - 2024
Voting member of the committee	
Actuarial Undergraduate Student Association of Université Laval	2020 - 2021
Vice President of Finance	
RESEARCH AFFILIATIONS	
Institut Intelligence et Données	2021 - present
Université Laval	Loui procom
Big Data Research Center	2021 - present
Université Laval	
Quantact research laboratory	2021 - present
Université de Montréal	'
Centre de recherches mathématiques	2021 - present
Université de Montréal	
OTLIED	
<u>OTHER</u>	
Described to the second	2025
Roundtable to raise awareness on youth bullying  Mammouth hebdo - Téléquébec	2025
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Actuarial School representative at the open house Faculty of Science and Engineering	2022 2022
FACULTY OF SCIENCE AND ENGINEERING	2022 - 2023
	2022 - 2023
Winter 2023 ( ≈ 30 visits from students accompanied by their parents)      Fall 2023 ( a FO visits from students accompanied by their parents)	2022 - 2023

- Fall 2022 (  $\approx$  50 visits from students accompanied by their parents)