

# OLIVIER CÔTÉ, ACAS

PhD Candidate in Actuarial Science

## CONTACT INFORMATION

📍 Québec, QC, Canada  
✉ olivier.cote.12@ulaval.ca  
🌐 in/olivier-cote-act  
🌐 olicoside.github.io

## SKILLS

**R** 8 years +

**Python** 3 years +

**LaTeX** 6 years +

## LANGUAGES

**French** Mother tongue

**English** Advanced

## EDUCATION

**PhD in Actuarial Science (GPA : 4.17/4.33)**

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).

2023 -

**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

## RESEARCH PAPERS

Charpentier, A., Machado, A. F., **Olivier Côté**, and Hu, F. (2026). Federated measurement of demographic disparities from quantile sketches. Submitted (no pre-print)

**Côté, Olivier**, Côté, M.-P., and Charpentier, A. (2025). A scalable toolbox for exposing indirect discrimination in insurance rates. *Forthcoming with the Casualty Actuarial Society*

Charpentier, A., **Côté, Olivier**, and Côté, M.-P. (2025). A three-pillar governance framework for fair insurance pricing. *Submitted (no pre-print)*

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

- Finalist for the American Academy Award for Research

Côté, M.-P., **Côté, Olivier**, 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**

Canadian Statistical Sciences Institute

2025

**Let's talk about race and collective responsibility**

Canadian Statistical Sciences Institute

2024

**Acting as a sentinel for the prevention of suicide**

Centre de prévention du suicide du Québec workshop

2023

**Addressing Conflicts Related to Bias, Privilege, and Identity in the STEM Fields**

CANSSI and Academic Impressions workshop

2022

## PROFESSIONAL DESIGNATIONS

<b>Associate of the Casualty Actuarial Society (ACAS)</b> Casualty Actuarial Society	2025
<b>Exam 6C</b> Casualty Actuarial Society	2025
<b>Professionalism Workshop</b> Canadian Institute of Actuaries	2025
<b>Online Course 2</b> Casualty Actuarial Society	2024
<b>MAS-I, MAS-II, Exam 5 and Online Course 1</b> Casualty Actuarial Society	2020 - 2022
<b>Exam P, FM and IFM</b> Society of Actuaries and Canadian Institute of Actuaries (credits)	2019- 2020

## WORK EXPERIENCES

<b>Course lecturer</b> Université Laval	2022 - 2023
<ul style="list-style-type: none"><li>• Linear Models in Actuarial Science (mandatory undergraduate course, 3 credits)<ul style="list-style-type: none"><li>– Fall 2022, 88 students enrolled</li></ul></li><li>• Statistical Learning in Actuarial Science (mandatory undergraduate course, 3 credits)<ul style="list-style-type: none"><li>– Winter 2023, 54 students enrolled</li></ul></li></ul> <p>*Awards included: Faculty of Science and Engineering Teaching Star (2022-2023).</p>	
<b>American football coach</b> Falcons of Cégep de Lévis	2019 - 2026
American football coach for different teams since 2012 (10 years). I am coaching collegiate D2 for Cégep de Lévis since 2019 :	
<ul style="list-style-type: none"><li>• Tight ends and Fullbacks coach (2019-2026)</li><li>• Supervisor for a bachelor's degree intern in sports intervention (2023)</li></ul> <p>*Awards included: Coaching Staff of the year 2023 and 2024. Coaching Staff Sportsmanship Award 2022 (D1) and 2023 (D2).</p>	
<b>Teaching assistant</b> Université Laval	2019 - 2024
Teaching assistants on several occasions :	
<ul style="list-style-type: none"><li>• Evaluator for actuarial student internships (1 time)</li><li>• Probabilistic Analysis of Actuarial Risks (3 times)</li><li>• Statistical Learning in Actuarial Science (5 times)</li><li>• Linear Models in Actuarial Science (1 time)</li></ul>	
<b>Actuarial intern</b> Desjardins General Insurance Group	2019 - 2021
Intern for Property Ratemaking (2019), Business analysis (2020 and 2021), and Research (2021).	

## REFEREEING

<b>Referee</b> <i>Journal of Risk and Insurance</i>	2024 – present
<b>Referee</b> <i>Annals of Actuarial Science</i>	2026 – present

# SCHOLARSHIPS AND AWARDS

<b>Student travel grant</b> <b>Big Data Research Center</b> Travel grant to support conference participation and dissemination of research (\$2000 CAD).	2026
<b>Postgraduate Scholarships – Doctoral</b> <b>Natural Sciences and Engineering Research Council of Canada</b> This competitive scholarship that amounts to \$ 120 000 CAD on three years.	2025
<b>Hickman Scholars Program</b> <b>Society of Actuaries</b> A highly competitive international scholarship that amounts to 20 000 USD per year (not guaranteed).	2024 - present
<b>Doctoral Training Scholarships</b> <b>Fonds de recherche du Québec (Nature et technologies)</b> This competitive scholarship that amounts to \$ 100 000 CAD on four years.	2024
<b>Project partnership fund</b> <b>MITACS</b> This fund was negotiated with an industrial partner that amounts to \$ 84 000 CAD on three years.	2024
<b>Doctorate attraction grant Florent Toureille</b> <b>Chaire d'actuariat de l'Université Laval</b> This competitive scholarship based on leadership and excellence amounts to \$ 30 000 CAD on three years.	2023
<b>Leadership and Engagement Scholarship</b> <b>Université Laval</b> This competitive sports leadership scholarship amounts to \$ 30 000 CAD on three years.	2023
<b>Charles Brindamour Graduate Scholarship for Excellence</b> <b>Charles Brindamour (Intact CEO)</b> Competitive scholarship based on excellence amounts to \$10 000 CAD.	2023
<b>François-Lavolette Scholarship</b> <b>François-Lavolette Scholarship fund</b> Competitive scholarship to promoting the development of responsible AI. This award amounts to \$7 500 CAD.	2022
<b>Grant of attraction to the Master's</b> <b>Chaire d'actuariat de l'Université Laval</b> Grant recognizing the research potential for future Master's thesis students, amount of \$15 000 CAD.	2021
<b>CAS Trust Scholarship</b> <b>Casualty Actuarial Society</b> A highly competitive international scholarship competition that amounts to \$2 500 USD.	2021
<b>Alexander-Graham-Bell Scholarship</b> <b>Natural Sciences and Engineering Research Council</b> Competition for the 2021-2022 cohort of graduate scholarships that amounts to \$17 500 CAD.	2021
<b>Lieutenant-Governor's Medal</b> <b>Cégep de Lévis</b> Awarded to a student whose involvement and academic results are distinguishable.	2018

# ACADEMIC COMMUNICATIONS

<b>Profiling Actuarial Discrimination via causal decomposition</b> <b>Actuarial and Financial Mathematics Conference, Brussels (Belgium)</b> Poster presenter <b>(Audience: academics)</b> .	2026
<b>Bias in Assessing Financial Risk: Insights from the 2025 Research Award</b> <b>American Academy of Actuaries</b> Invited panelist as finalist for the 2025 Award for Research on Bias in Assessing Financial Risk. Webinar to 445 actuaries and practitioners. <b>(Audience: end-users)</b>	2026
<b>A Causal Perspective on Fairness in Insurance Pricing</b> <b>Department of Mathematics, Stockholm University</b> Invited seminar talk during research stay <b>(Audience: academics)</b> .	2026
<b>A Scalable Toolbox for Exposing Indirect Discrimination In Insurance Rates</b> <b>ASTIN Bulletin Conference, Zurich (Switzerland)</b> Speaker at one of the fairness session at the ASTIN Bulletin conference <b>(Audience: academics)</b> .	2026
<b>Operationalizing Fairness in Actuarial Pricing: From Principle to Practice</b> <b>Department of Statistics, University of Toronto</b> Invited seminar during research visit. <b>(Audience: academics)</b>	2025
<b>Operationalizing Fairness in Actuarial Pricing: From Principle to Practice</b> <b>Casualty Actuarial Society Canada Connect Day, Toronto (Canada) &amp; Annual Meeting, Austin (United States)</b> Presenter to over 120 actuaries and policymakers at each event. <b>(Audience: end-users)</b>	2025
<b>Two invited presentations at the 60th Actuarial Research Conference</b> <b>American Academy of Actuaries panel &amp; Casualty Actuarial Society session, Toronto (Canada)</b> Guest panelist and presenter (with Marie-Pier and Arthur) to audiences from actuarial organizations, academia, industry, and policymakers. <b>(Audience: decision-makers)</b>	2025
<b>A Scalable Toolbox for Exposing Indirect Discrimination in Insurance Rates</b> <b>Perspectives on Actuarial Risks in Talks of Young Researchers (PARTY), Liverpool (U.K.)</b> Presenter to over 60 young researchers from academia. <b>(Audience: academics)</b>	2025
<b>Une boîte à outils pour dévoiler la discrimination indirecte dans les tarifs d'assurance</b> <b>Chaire ACTIONS &amp; Milliman R&amp;D, Paris (France)</b> Guest co-presenter (with Arthur) to audiences from academia and industry. <b>(Audience: general)</b>	2025
<b>Perspective causale sur les discriminations dans les modèles prédictifs en assurance</b> <b>Institut intelligence et données</b> Guest presenter to over 100 people from academia. <b>(Audience: academics)</b>	2024
<b>A Fair price to pay: exploiting causal graphs for fairness in insurance</b> <b>27th International Congress on Insurance: Mathematics and Economics</b> Academic presentation in Chicago, IL, United States <b>(Audience: academics)</b>	2024
<b>A Fair price to pay: exploiting causal graphs for fairness in insurance</b> <b>Workshop on fairness and discrimination in insurance</b> Guest presenter to over 60 people from academia, practitioners and regulators. <b>(Audience: general)</b>	2024
<b>Perspective causale sur la discrimination indirecte en assurance générale</b> <b>Autorité des marchés financiers</b> Presentation to decision-makers at Québec's financial authority. <b>(Audience: decision-makers)</b>	2024
<b>Équité et discrimination en assurance générales</b> <b>Intact Financial Corporation</b> Presentation to CEO, CLO and CDO of Intact Financial Corporation. <b>(Audience: decision-makers)</b>	2023
<b>Causal inference and Fairness in Insurance Pricing</b> <b>Insurance Data Science Conference</b> Presenter for Insurance Data Science Conference  in London (UK). <b>(Audience: Academics)</b>	2023

## PUBLIC OUTREACH

<b>L'avenir à travers une boule de cristal mathématique : Le travail d'un actuair</b> <b>Cégep de Lévis</b> Guest presenter for CEGEP students. <b>(Audience: Students)</b>	2023-2026
<b>Pour une intelligence artificielle équitable en assurance</b> <b>Université Laval News</b> I collaborated for a scientific communication article <a href="#">↗</a> . <b>(Audience: General Public)</b>	2024
<b>Perspective causale sur la discrimination indirecte en assurance générale</b> <b>Institut Intelligence et données</b> 4th research competition on data intelligence. ≈ 50 graduate students <b>(Audience: general)</b>	2024
<b>Perspective causale sur la discrimination indirecte en assurance générale</b> <b>Institut de valorisation des données</b> I presented my research <a href="#">↗</a> during IVADO Digital Future Day 2024. Over 250 people. <b>(Audience: general)</b>	2024
<b>L'IA pour calculer le prix de votre assurance auto: poétique ou pas éthique?</b> <b>Big Data Research Center</b> Presentation during the event <i>lightning talks 180</i> <b>(Audience: General)</b> <b>*Awards included:</b> Public's choice award	2023
<b>Artificial intelligence to prevent unfair discrimination in auto insurance</b> <b>IVADO</b> I authored an 800-word scientific communication article <a href="#">↗</a> . <b>(Audience: General)</b>	2023

## COMMITTEES

<b>Institut Intelligence et Données, Université Laval</b> <b>Voting member of the Committee</b>	2025 - present
<b>Actuarial Science Graduate Program Committee of Université Laval</b> <b>Voting member of the Committee</b>	2022 - present
<b>Big Data Research Center of Université Laval</b> <b>Student voting member of the Committee</b>	2022 - 2025
<b>Actuarial Science Student Investment Fund of Université Laval</b> <b>Voting member of the committee</b>	2021 - 2024

## RESEARCH AFFILIATIONS

<b>Institut Intelligence et Données</b> <b>Université Laval</b>	2021 - present
<b>Big Data Research Center</b> <b>Université Laval</b>	2021 - present
<b>Quantact research laboratory</b> <b>Université de Montréal</b>	2021 - present
<b>Centre de recherches mathématiques</b> <b>Université de Montréal</b>	2021 - present

## OTHER

<b>Roundtable on raising awareness about youth bullying</b> <b>Mammoth hebdo - Téléquébec</b> <a href="#">↗</a>	2025
<b>Actuarial School representative at the open house</b> <b>Faculty of Science and Engineering</b> <ul style="list-style-type: none"><li>• Winter 2023 ( ≈ 30 visits from students accompanied by their parents)</li><li>• Fall 2022 ( ≈ 50 visits from students accompanied by their parents)</li></ul>	2022 - 2023