

# OLIVIER CÔTÉ

Curriculum vitae

## CONTACT INFORMATION

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## SKILLS

- R** 7 years +
- Python** 2 years +
- LaTeX** 5 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)** 2021 - 2023\*  
**Université Laval**  
\*Fast-track to the PhD.
- Bachelor's degree in Actuarial Science (GPA : 4.17/4.33)** 2018 - 2021  
**Université Laval**
- Natural Sciences** 2015 - 2017  
**Cégep de Lévis**

## PROFESSIONAL EXAMS

- Online Course 1** 2022  
**Casualty Actuarial Society**
- MAS-I, MAS-II and Exam 5** 2020 - 2022  
**Casualty Actuarial Society**
- Credit for Exam FM and Exam IFM** 2019 - 2020  
**Canadian Institute of Actuaries**
- Exam P** 2019  
**Society of Actuaries**

## PUBLICATIONS

- 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*
- Côté, O., Côté, M.-P., and Charpentier, A. (2024). A fair price to pay: exploiting causal graphs for fairness in insurance. *Available at SSRN 4709243*

## OTHER EDUCATION

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

## WORK EXPERIENCES

Course lecturer

Université Laval

2022 - 2023

- 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

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 :

2019 - present

- 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 :

2019 - 2024

- 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

Desjardins General Insurance Group


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

2019 - 2021


# SCHOLARSHIPS AND AWARDS

<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
<b>Doctoral Training Scholarships</b> <b>Fonds de recherche du québec (Nature et technologies)</b> This competitive scholarship that amounts to 100 000\$ 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\$ on three years.	2024
<b>ESSOR graduate studies Scholarship</b> <b>Pierre Viger Family</b> This competitive scholarship based on leadership, and research potential amounts to 30 000\$ on three years.	2023
<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\$ on three years.	2023
<b>Leadership and Engagement Scholarship</b> <b>Université Laval</b> This competitive sports leadership scholarship amounts to 30 000\$ 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-Laviolette Scholarship</b> <b>François-Laviolette 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

## SCIENTIFIC COMMUNICATIONS

<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. (Audience: academics)	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 (Audience: academics)	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. (Audience: general)	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. (Audience: decision-makers)	2024
<b>The Fairness in Insurance Enigma: Exploring the Maze of Regulation</b> <b>7th Ontario-Québec Workshop in Insurance Mathematics</b> Poster in an event where over 70 academics were present. (Audience: academics)	2024
<b>Équité et discrimination en assurance générales</b> <b>Desjardins groupe assurances générales</b> Presentation to ≈ 40 actuaries and data scientists (Audience: End-users)	2023
<b>Équité et discrimination en assurance générales</b> <b>Intact Financial Corporation</b> Presentation to CEO, CLO and CDO of Intact Financial Corporation. (Audience: decision-makers)	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). (Audience: Academics)	2023
<b>Équité et discrimination en assurance générales</b> <b>Desjardins groupe assurances générales</b> Presentation to ≈ 40 actuaries (Audience: end-users)	2023
<b>Fairness in Insurance : Overview of discrimination-free models</b> <b>Quantact Summerday 2022</b> Guest presenter in Concordia University. (Audience: academics)	2022
<b>Équité en assurance : revue des modèles non discriminatoires</b> <b>Workshop on Fairness and Discrimination in Insurance</b> Guest presenter to over 50 people from academia and industry (Audience: general)	2022

## PUBLIC ENGAGEMENT AND OUTREACH

<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 (Audience: general)	2024
<b>Perspective causale sur la discrimination indirecte en assurance générale</b> <b>Institut de valorisation des données</b> I presented a my research  during IVADO Digital Future Day 2024. Over 250 people. (Audience: general)	2024
<b>Discrimination injustifiée en assurance générale: une perspective causale</b> <b>Faculty of Science and Engineering</b> Presentation during the <i>Research Day in Science and Engineering</i> (Audience: General)	2023

<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> (Audience: General) Awards included: 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. (Audience: General)	2023
<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 willing to learn more about our profession. (Audience: Students)	2023-2024
<b>How to improve fairness in insurance? Towards more responsible pricing</b> <b>Actulab 2022</b> Problem-solving workshops. (Audience: End-users) Awards included: Coup de coeur Entrepreneuriat ULaval award (1000 CAD)	2022
<b>Gala of Excellence</b> <b>Pointe-Lévy High School</b> Guest of honor for the Student-Athlete Excellence Gala. (Audience: Students)	2022

## COMMITTEES

<b>Actuarial Science Graduate Program Committee of Université Laval</b> Voting member of the Committee	2022 - present
<b>Big Data Research Center of Université Laval</b> Student voting member of the Committee	2022 - present
<b>Actuarial Science Student Investment Fund of Université Laval</b> Voting member of the committee	2021 - present
<b>Actuarial Undergraduate Student Association of Université Laval</b> Vice President of Finance	2020 - 2021

## RESEARCH AFFILIATIONS

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

## OTHER

<b>Actuarial School representative at the open house</b> Faculty of Science and Engineering	2022 - 2023
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- Winter 2023 ( ≈ 30 visits from students accompanied by their parents)
- Fall 2022 ( ≈ 50 visits from students accompanied by their parents)