

Zachary Van Oosten

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Academic Appointments

HEC Montréal

Assistant Professor, Department of Decision Sciences

Jul 2026 – Present

Education

Ph.D. Actuarial Science and Quantitative Finance

Supervisors: Dr. Ruodu Wang and Dr. Yi Shen

University of Waterloo

Sep 2022 – Jun 2026

M.Math Statistics

Supervisor: Dr. Adam Kolkiewicz

University of Waterloo

Sep 2021 – Aug 2022

B.Math Joint Pure Mathematics/Statistics - Minor in Applied Mathematics

University of Waterloo

Sep 2016 – Aug 2021

Research

Publications

1. Shen, Y., Van Oosten, Z. and Wang, R. (2025). Partial law invariance and risk measures. Management Science, published online ahead of print. [DOI](#).

Working Papers

1. Van Oosten, Z. and Wang, R. (2025). Choquet rank-dependent utility with an exogenous unambiguous source. [arXiv](#).
2. Van Oosten, Z. and Wang, R. (2025). Aggregate then evaluate. [arXiv](#).

Teaching Experience

Instructor: Regular Courses

ACTSC 446/846 - Mathematics of Financial Markets

University of Waterloo

Winter 2025

STAT 231 - Statistics

University of Waterloo

Fall 2024

Honours, Awards, and Funding

NSERC Postdoctoral Fellowship (declined)

Nationally competitive postdoctoral fellowship awarded by NSERC; declined due to acceptance of an Assistant Professor position.

Natural Sciences and

Engineering Research

Council of Canada

2026

ARC Graduate Student Presentation Award (first place)

Recognition for the best graduate student research presentation at the 60th Actuarial Research Conference.

Society of Actuaries

Aug 2025

Sprott Scholarship

This scholarship is given annually to a student who has been recognized by the Statistics and Actuarial Science department as having shown

University of Waterloo

Jul 2025

particular promise in research in the PhD program prior to the final approval of their thesis.

Ontario Graduate Scholarship	Government of Ontario 2025 – 2026
Provincial merit-based scholarship awarded by the Province of Ontario in recognition of academic excellence and research achievement at the graduate level.	
Queen Elizabeth II Graduate Scholarship in Science and Technology (×2)	Government of Ontario 2022 – 2023 2023 – 2024
Competitive provincial scholarship awarded to recognize academic excellence and research potential in science and technology.	
SAS Graduate Outstanding Performance Award	University of Waterloo Dec 2024
This scholarship is given annually to a student in the Statistics and Actuarial Science (SAS) department with the best performance in the comprehensive examination.	
SASF Conference Presentation Award	University of Waterloo Oct 2023
The Statistics, Actuarial Science and Finance (SASF) Conference Presentation Award is given annually to up to four students who gave the best research presentation by participating in the Waterloo Student Conference in Statistics, Actuarial Science and Finance Conference.	

Presentations

Conference Presentations

The aggregate-then-evaluate approach to ambiguity	Queen's University June 2026
<i>Title:</i> Distributionally robust optimization under Bayesian ambiguity sets	
2026 SSC Annual Meeting	McMaster University June 2026
<i>Title:</i> Distributionally robust optimization under Bayesian ambiguity sets	
1st ASTIN Bulletin Conference	ETH Zürich Jan 2026
<i>Title:</i> General Choquet risk measures	
60th Actuarial Research Conference	York University Jul 2025
<i>Title:</i> The Choquet rank-dependent loss model	
Risk Measures and Uncertainty in Insurance	Hannover, Germany May 2024
<i>Title:</i> Partial law invariance and risk measures	
Simon Conference 2023	Michigan State University Nov 2023
<i>Title:</i> Partially law-invariant risk measures	
4th Waterloo Student Conference in Statistics, Actuarial Science and Finance.	University of Waterloo Oct 2023
<i>Title:</i> Partially law-invariant risk measures	

Seminar Presentations

Student Seminar Series	University of Waterloo Feb 2026
<i>Title:</i> The Aggregate-then-Evaluate Approach to Ambiguity	
Financial/Actuarial Mathematics Seminar (virtual)	University of Michigan Dec 2025
<i>Title:</i> The aggregate-then-evaluate approach to model uncertainty	

Risk and Insurance Seminar Series	Wisconsin School of Business
<i>Title:</i> The aggregate-then-evaluate approach to model uncertainty	Nov 2025
Student Seminar Series	University of Waterloo
<i>Title:</i> Partially law-invariant risk measures	Mar 2024
Waterloo x UT Austin	University of Texas at Austin
<i>Title:</i> Axiomatization of risk measures: Risk and uncertainty	Feb 2024

Panel Discussions

University of Waterloo Teaching and Learning Conference	University of Waterloo
<i>Title:</i> How do graduate student instructors in STEM navigate challenges with the help of their mentors?	Apr 2025
<i>Recording:</i> YouTube	

Academic Services

Referee Service

ASTIN Bulletin (Cambridge University Press / International Actuarial Association)
 Operations Research (INFORMS)
 Mathematics of Operations Research (INFORMS)
 Statistics & Risk Modeling (De Gruyter)

Conference and Seminar Organization

Seminar Organizer	CANSSI Ontario
CANSSI Ontario Statistics Seminar	May 2025
Conference Co-chair	University of Waterloo
5th Waterloo Student Conference in Statistics, Actuarial Science and Finance	Oct 2024
Seminar Series Co-organizer	University of Waterloo
Weekly Seminars on Risk Management and Actuarial Science	Sep 2024 – Apr 2025

Representative Roles

Graduate Student Representative	University of Waterloo
Nominating Committee for the next Chair of the Department of Statistics and Actuarial Science	Aug 2025 – Oct 2025
University of Waterloo Student Representative	CANSSI Ontario
Student PhD and Research Network (SPARK)	May 2024 – Apr 2025
Department Student Representative	University of Waterloo
Department of Statistics and Actuarial Science	Jul 2023 – Jun 2025