

# Qiuqi Wang

Department of Statistics and Actuarial Science  
University of Waterloo  
Mathematics 3, 200 University Avenue West  
Waterloo, Ontario, Canada N2L 3G1

Email: q428wang@uwaterloo.ca  
Tel: +1 (226) 388-0900  
Office: M3 Room 4233  
Website: <https://qwangan.github.io/>

---

## Education

- Ph.D. Candidate in Actuarial Science, University of Waterloo 09/2019 - present  
– Supervisor: Ruodu Wang
- M.Phil. Mathematics, Hong Kong University of Science and Technology 07/2019  
– Thesis: “*Real Option Signaling Games under Asymmetric Information and Finite Option Life*”  
– Supervisor: Yue Kuen Kwok  
– GPA: 4.00/4.30
- B.S. Mathematics and Economics, Hong Kong University of Science and Technology 07/2017  
– Minor: Information Technology  
– GPA: 3.61/4.30 (First Class Honor)
- International Exchange Student, Technical University of Munich 04/2016 - 09/2016
- 

## Research Interests

Actuarial Science; Quantitative Risk Management; Operations Research; Financial Engineering; Game Theory

---

## Publications and Manuscripts

- [1] Han, X., **Wang, Q.**, Wang, R. and Xia, J. (2021). Cash-subadditive risk measures without quasi-convexity. Submitted. *arXiv*: <https://arxiv.org/abs/2110.12198#>.
- [2] **Wang, Q.**, Wang, R. and Zitikis, R. (2021). Risk measures induced by efficient insurance contracts. Submitted. *arXiv*: <https://arxiv.org/abs/2109.00314>.
- [3] Pesenti, S., **Wang, Q.** and Wang, R. (2021). Optimizing distortion riskmetrics with distributional uncertainty. Submitted. *arXiv*: <https://arxiv.org/abs/2011.04889>.
- [4] Embrechts, P., Mao, T., **Wang, Q.** and Wang, R. (2021). Bayes risk, elicibility, and the Expected Shortfall. *Mathematical Finance*, **31**(4), 1190–1217.
- [5] **Wang, Q.**, Wang, R. and Wei, Y. (2020). Distortion riskmetrics on general spaces. *ASTIN Bulletin*, **50**(4), 827–851.
- [6] **Wang, Q.** and Kwok, Y.K. (2020). Real option signaling games of debt financing using equity guarantee swaps. *International Journal of Theoretical and Applied Finance*, **23**(5), 2050036.
- [7] **Wang, Q.** and Kwok, Y.K. (2019). Signaling game models of equity financing under information asymmetry and finite project life. *International Journal of Financial Engineering*, **6**(1), 1950002.

---

## Selected Honors and Awards

James C. Hickman Scholar Doctoral Stipend (\$20,000/year), SOA	<i>2021 – 2022</i>
SAS Chair's Award, UW	<i>2021 – 2022</i>
International Doctoral Student Award, UW	<i>2019 – 2021</i>
Statistics and Actuarial Science Doctoral Entrance Award, UW	<i>2019 – 2021</i>
Postgraduate Studentship, HKUST	<i>2017 – 2019</i>
Scholarship Scheme for Continuing Undergraduate Students, HKUST	<i>2015 – 2017</i>
Fong Shu Chuen Scholarship, HKUST	<i>2015 – 2016</i>
School of Science Dean's List, HKUST	<i>2014</i>

---

## Conferences Organized

- 2nd Waterloo Student Conference in Statistics, Actuarial Science and Finance (Student Co-chair), 2021 (Online)

---

## Invited Academic Presentations

- SIAM Conference on Financial Mathematics and Engineering, 2021 (Online)

---

## Contributed Academic Presentations

- 56th Actuarial Research Conference, 2021 (Online)
- 24th International Congress on Insurance: Mathematics and Economics, 2021 (Online)
- 5th PKU-NUS Annual International Conference on Quantitative Finance and Economics, 2021 (Online)
- 5th Asian Quantitative Finance Seminar, 2020 (Online)
- 1st Waterloo Student Conference in Statistics, Actuarial Science and Finance, 2019 (Waterloo, Canada)
- 23rd Annual International Real Options Conference, 2019 (London, UK)

---

## Teaching Experiences

- Teaching Assistant, University of Waterloo

ACTSC 431 - Casualty and Health Insurance Mathematics 2	<i>Spring 2021</i>
MATBUS 472 - Risk Management	<i>Winter 2021</i>
ACTSC 431 - Loss Model I	<i>Spring 2020</i>
ACTSC 445/845 - Quantitative Enterprise Risk Management	<i>Spring 2020</i>
ACTSC 231 - Introductory Financial Mathematics	<i>Winter 2020</i>
MATBUS 471 - Fixed Income Securities	<i>Fall 2019 – 2021, Winter 2020</i>
MATBUS 470 - Derivatives	<i>Fall 2019 – 2021, Winter 2021</i>

- Teaching Assistant, Hong Kong University of Science and Technology

MATH 4321 - Game Theory

*Spring 2018 – 2019*

MATH 4511 - Quantitative Methods for Fixed Income  
Derivatives

*Fall 2018*

---

## Other Skills

Languages: Mandarin (Native), English (Fluent, TOEFL iBT: 108), Cantonese (Conversational), German (Elementary)

Programming: MATLAB, C++, R, HTML, Python, Stata, Excel VBA, MS Office

SOA Exams passed: VEE Applied Statistics, VEE Economics, Exam P, Exam FM, Exam IFM, Exam SRM, Exam PA, Exam STAM

---

Last updated: Dec 2021