# Linfeng Zhang, Ph.D.

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# **EDUCATION**

2019–2023	Ph.D., Mathematics (Concentration in Actuarial Science and Risk Analytics)
	Supervisors: Runhuan Feng and Wing Fung Chong
	Department of Mathematics
	College of Liberal Arts & Sciences
	University of Illinois at Urbana-Champaign
2015–2016	M.Sc., Finance
	Gies College of Business
	University of Illinois at Urbana-Champaign
2011–2015	B.Sc., Actuarial Science
	B.Sc., Statistics
	Minor in Astronomy
	University of Illinois at Urbana-Champaign

# **PROFESSIONAL EXPERIENCE**

Assistant Professor, The Ohio State University
Visiting Assistant Professor, Drake University
Data Scientist, Charlee.AI
Project Manager, Illinois Risk Lab, University of Illinois
Research Scientist, Information Trust Institute, University of Illinois
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# PUBLICATIONS

#### **Peer Reviewed**

- [8] Chong, W.F., Feng, R., Hu, Z., **Zhang, L.** (To appear). Cyber Risk Assessment for Capital Management. *Journal of Risk and Insurance*.
- [7] **Zhang, L.**, Hu, C., Quan, Z. (To appear). NLP-Powered Repository and Search Engine for Academic Papers: A Case Study on Cyber Risk Literature with CyLit. *North American Actuarial Journal*.
- [6] Chen, X., Chong, W.F., Feng, R., Zhang, L. (2021). Pandemic Risk Management: Resources Contingency Planning and Allocation. *Insurance: Mathematics and Economics*. 101, 359– 383.

- [5] Kesan, J.P., **Zhang, L.** (2021). When Is A Cyber Incident Likely to Be Litigated and How Much Will It Cost? An Empirical Study. *Connecticut Insurance Law Journal*. 27(2), 529–580.
- [4] Kesan, J.P., **Zhang, L.** (2020). Analysis of Cyber Incident Categories Based on Losses. *ACM Transactions on Management Information Systems*. 11, 1–28.
- [3] Kesan, J.P., Zhang, L. (2019). An Empirical Investigation of the Relationship between Local Government Budgets, IT Expenditures and Cyber Losses. *IEEE Transactions on Emerging Topics in Computing*. 9(2), 582–596.
- [2] Tonn, G., Kesan, J.P., **Zhang, L.**, Czajkowski, J. (2019). Cyber Risk and Insurance for Transportation Infrastructure. *Transport Policy*. 79, 103–114.
- Shetty, S., McShane, M., Zhang, L., Kesan, J.P., Kamhoua, C.A., Kwiat, K., Njilla, L.L. (2018). Reducing Informational Disadvantages to Improve Cyber Risk Management. *The Geneva Papers on Risk and Insurance - Issues and Practice*. 43, 224–238.

#### Submitted

[1] Chong, W.F., Linders, D., Quan, Z., **Zhang, L.** Incident-Specific Cyber Insurance. (Submitted to ASTIN Bulletin, Major revision)

#### In Prep

- [2] Zhang, L. An Actuarial Perspective on Inventory Management for Medical Supplies.
- [1] Chong, W.F., Feng, R., **Zhang, L.** In Preparation for Privacy Breach: Balancing Data Utility and Privacy Risk.

#### Other

- [2] Quan. Z., **Zhang, L.**, Chong, W.F., Feng, R. (2023). CyLit: An NLP-Powered Repository and Search Tool for Cyber Risk Literature. Society of Actuaries Research Institute.
- [1] Feng, R., Garrido, J., Jin, L., Loke, SH., **Zhang, L.** (2022). Epidemic Compartmental Models and Their Insurance Applications. In: Boado-Penas, M.d.C., Eisenberg, J., Şahin, Ş. (eds) *Pandemics: Insurance and Social Protection*. Springer Actuarial. Springer, Cham.

#### GRANTS

- 2024 **CKER Individual Grant Competition**, with Zhiyu Quan, Casualty Actuarial Society and Society of Actuaries
- 2022 **SOA Cyber Risk Literature Search Grant**, with Wing Fung Chong, Runhuan Feng, and Zhiyu Quan, Society of Actuaries
- 2020 **Impact of COVID-19 Grant**, with Xiaowei Chen, Wing Fung Chong, and Runhuan Feng, Canadian Institute of Actuaries

## AWARDS & FELLOWSHIPS

- 2022 **ARC Graduate Student Presentation Award Honorable Mention**, 2022 Actuarial Research Conference, Society of Actuaries
- 2021 **Maplesoft Best Student Paper Awards**, Virtual 24th International Congress on Insurance: Mathematics and Economics
- 2020 CAS Best of 2020, 2020 CAS Annual Meeting, Casualty Actuarial Society
- 2019 State Farm Mathematics Doctoral Scholarship, State Farm Insurance

# PRESENTATIONS

## **Invited Talks**

- **Zhang, L.** 2023. Cyber Risk Assessment for Capital Management. Shanghai Forum, Shanghai, China.
- **Zhang, L.** 2023. Cyber Risk Assessment for Capital Management. Joint Research Seminar of Peking University, Tsinghua University, and Renmin University of China on Economics of Risk, Insurance, and Uncertainty, Beijing, China.
- **Zhang, L.** 2023. Capital Allocation for Cyber Insurance and Other Mitigations. Actuarial Science Seminar, Champaign, Illinois.
- Feng, R., Chong, W.F., & **Zhang, L.** 2021. Pandemic Risk Management: Resources Contingency Planning and Allocation. 2021 Casualty Loss Reserve Seminar, Online.
- **Zhang, L.** 2018. Cyber Risk Assessment to Empower Cyber Insurance Markets. ISF US Chapter Spring Conference, Chicago, Illinois.

## **Contributed Presentations**

- **Zhang, L.** 2024. Machine Learning Methods for Designing Optimal Multiple-peril Cyber Insurance. 2024 Joint Statistical Meetings, Portland, Oregon.
- **Zhang, L.** 2024. Machine Learning Methods for Designing Optimal Multiple-peril Cyber Insurance. 27th International Congress on Insurance: Mathematics and Economics, Chicago, Illinois. Congress on Insurance: Mathematics and Economics
- **Zhang, L.** 2023. Introduction to Capital Allocation. Invitations to Mathematics Lecture Series, Columbus, Ohio.
- **Zhang, L.** 2023. Cyber Risk Assessment for Capital Management. Simon Conference 2023, East Lansing, Michigan.
- **Zhang, L.** 2023. Cyber Risk Assessment for Capital Management. Midwest Actuarial Research Seminars 2023, West Lafayette, Indiana.
- **Zhang, L.** 2022. Cyber Risk Assessment for Capital Management. 2022 INFORMS Annual Meeting, Indianapolis, Indiana.
- **Zhang, L.** 2022. Pandemic Risk Management: Resources Contingency Planning and Allocation. The 57th Actuarial Research Conference, Champaign, Illinois.
- **Zhang, L.** 2022. Pandemic Risk Management: Resources Contingency Planning and Allocation. 25th International Congress on Insurance: Mathematics and Economics, Online.

- **Zhang, L.** 2021. Cyber Risk Assessment of Capital Management. Virtual 24th International Congress on Insurance: Mathematics and Economics, Online.
- **Zhang, L.** 2021. Cyber Risk Assessment of Capital Management. The 56th Actuarial Research Conference, Online.
- Feng, R., Chong, W.F., & **Zhang, L.** 2021. Pandemic Risk Management: Resources Contingency Planning and Allocation. act21 CIA Annual Conference, Online.
- Feng, R., Chong, W.F., & Zhang, L. 2020. Pandemic Risk Management: Resources Contingency Planning and Allocation. 2020 CAS Annual Meeting, Online.
- Feng, R., Chong, W.F., & **Zhang, L.** 2020. Pandemic Risk Management: Resources Contingency Planning and Allocation. SOA Webcast, Online.
- Feng, R., Chong, W.F., & **Zhang, L.** 2020. Pandemic Risk Management: Resources Contingency Planning and Allocation. One World Actuarial Research Seminar, Online.
- Feng, R., Chong, W.F., & **Zhang, L.** 2020. Pandemic Risk Management: Resources Contingency Planning and Allocation. Fall 2020 Actuarial Science and Financial Mathematics Seminar, Champaign, Illinois.

# MENTORING

Hossam Berens Ali Mohamed	Visiting PhD	2025
William Carvalho	Summer ROMUS program at OSU	2024
Caroline Borrillo	Summer ROMUS program at OSU	2024
Suhas Beeravelli	Summer ROMUS program at OSU	2024
Sean-Paul Billups	Summer ROMUS program at OSU	2024
Isaias Vasquez	Ohio 5-OSU SURE program	2024

## TEACHING

#### Instructor

The Ohio State University	
MATH 5194 - Machine Learning in Finance	Fall 2024
MATH 5637 - Topics in Risk Modeling	Spring 2024, 2025
MATH 5632 - Financial Economics for Actuaries	Fall 2023
Drake University	
ACTS/INS 190 - Case Studies Ins & Act Sci	Fall 2022, Spring 2023
ACTS 135 - Mathematical Statistics	Fall 2022, Spring 2023
INS 051 - Personal Risk Management	Spring 2023
University of Illinois at Urbana-Champaign	
ASRM 195 - Foundations of Data Management	Fall 2020

#### **Teaching Assistant**

# **SERVICES**

## Referee

ASTIN Bulletin	2024
Risk Sciences	2024
Journal of Banking and Finance	2024
Variance	2023
The European Journal of Finance	2022
The North American Actuarial Journal	2021

## **Conference and Seminar Organization**

Co-Organizer	Actuarial Science and Quantitative Risk Manage-	2023–present
	ment Seminars	
Organizing Committee Member	60 <sup>th</sup> Actuarial Research Conference	2025
Organizing Committee Member	27 <sup>th</sup> International Congress on Insurance: Mathe-	2024
	matics and Economics	
Organizing Committee Member	58 <sup>th</sup> Actuarial Research Conference	2023
Volunteer	57 <sup>th</sup> Actuarial Research Conference	2022
Volunteer	24 <sup>th</sup> International Congress on Insurance: Mathe-	2021
	matics and Economics	

# Other

Faculty Advisor

OSU Archery Club

2023–present