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Professor Himchan Jeong

Language Skills

Language	Read	Write	Speak	Understand	Peer Review
English	Yes	Yes	Yes	Yes	Yes
Korean	Yes	Yes	Yes	Yes	Yes

Degrees

- 2020/8 Doctorate, Mathematics with Thesis in Actuarial Science, University of Connecticut
  Supervisors: Emiliano Valdez, 2016/8 - 2020/8

- 2016/8 Master's Thesis, Statistics, Seoul National University
  Supervisors: Myunghee Cho Paik, 2015/8 - 2016/8

- 2012/8 Bachelor's, Business Administration, Seoul National University

- 2012/8 Bachelor's, Mathematics, Seoul National University

Recognitions

2023/2
2022 Outstanding Reviewer Award Winner - 300
Multidisciplinary Digital Publishing Institute
Prize / Award
Acknowledgement of the time and energy dedicated by reviewers in checking the manuscripts submitted to Risks (Received in CHF)

2020/4
DeLuca Graduate Teaching Award - 350
Univesity of Connecticut
Prize / Award
An award given to outstanding teaching assistants each year by UConn Math department. (Received in USD)

2020/3
Teaching excellence from the Provost's Office for Fall 2019
Univesity of Connecticut
Honor
A letter from UConn Provost's office that congratulates and recognizes the achievement of UConn teaching assistants who excel in teaching on Fall 2019 teaching evaluations.

2019/7
Teaching excellence from the Provost's Office for Spring 2019
Univesity of Connecticut
Honor
A letter from UConn Provost's office that congratulates and recognizes the achievement of UConn teaching assistants who excel in teaching on Spring 2019 teaching evaluations.

2018/12	Risks 2019 Travel Awards - 800 Risks Prize / Award Awards supported travel for selected one postdoctoral fellow and one PhD student to present their research, in poster or oral presentation formats, at a scientific conference in 2019. (Received in CHF)
2018/7 - 2020/6	SOA James C. Hickman Doctoral Stipend - 40,000 Society of Actuaries Prize / Award A scholarship from the Society of Actuaries (SOA) given to competitive PhD students who are expected to pursue academic careers in the United States or Canada as a member of the SOA. (Received in USD)

User Profile

Research Specialization Keywords: Actuarial Science, Predictive Analytics, Ratemaking and Reserving for P&C insurance

Employment

2020/8	Assistant Professor Statistics and Actuarial Science, Simon Fraser University Full-time, Assistant Professor Tenure Status: Tenure Track
2016/8 - 2020/8	Graduate Assistant Mathematics, Storrs, Univesity of Connecticut Full-time Tenure Status: Non Tenure Track Taught various courses as a discussion leader as well as an instructor / Provided research assistance in the project “Applying data Mining Techniques in Actuarial Science”, supported by SOA Centers of Actuarial Excellence (CAE) Research Grant
2012/7 - 2015/1	Assistant Manager Long-term Maintenance Part, DB Insurance Helped maintaining and developing operating system for insurance product / Prepared monthly report of gross sales of insurance for regulatory authority / Provided educational material and seminar for employees about the system and regulation

Research Funding History

Awarded [n=7]

2021/4 - 2026/3 Principal Investigator	Insurance ratemaking with consideration of dynamic credibility, Grant **Funding Sources:** Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grants Program - Individual Total Funding - 102,500 Portion of Funding Received - 66,500 Funding Competitive?: Yes
2022/8 - 2023/7 Principal Applicant	CANSSI Graduate Student Exchange Scholarships, Scholarship **Funding Sources:** Canadian Statistical Science Institute

Graduate Student Exchange Scholarships
Total Funding - 8,000
Portion of Funding Received - 8,000
Funding Competitive?: Yes

Co-applicant : Yi Lu;

Principal Knowledge User : Tianxing Yan

2022/8 - 2023/7
Principal Investigator

Integration of Traditional and Telematics data for Efficient Insurance Claims Prediction, Grant

Funding Sources:
Canadian Institute of Actuaries (CIA)
CIA’s academic research program
Total Funding - 13,500
Portion of Funding Received - 13,500
Funding Competitive?: Yes

Co-applicant : Hashan Peiris

2022/5 - 2023/7
Co-investigator

Linear Classification Models for Risk Scoring, Grant

Funding Sources:
Casualty Actuarial Society
Individual Research Grant
Total Funding - 20,000
Portion of Funding Received - 10,000
Funding Competitive?: Yes

Principal Investigator : Bin Zou

2021/7 - 2022/6
Principal Investigator

Development of predictive model for car accidents via Telematics, Fellowship

Funding Sources:
Daesan Shin Yong Ho Memorial Society
Total Funding - 10,000
Portion of Funding Received - 10,000
Funding Competitive?: Yes

Co-investigator : Banghee So

2022/4 - 2022/4
Principal Investigator

Support for globalized research, Fellowship

Funding Sources:
Korea Risk Management Society
Total Funding - 4,000
Portion of Funding Received - 4,000
Funding Competitive?: Yes

2021/7 - 2022/3
Principal Investigator

Risk Aggregation for Measuring Required Capital via Copula-based Internal Models under K-ICS, Fellowship

Funding Sources:
Korean Insurance Academic Society
Early Career Researcher Fellowship
Total Funding - 3,000
Portion of Funding Received - 3,000
Funding Competitive?: Yes

Student/Postdoctoral Supervision

Master's Thesis [n=2]

2022/9 - 2024/4 Academic Advisor	Tianxing Yan (In Progress) , Simon Fraser University Thesis/Project Title: Multi-peril risk modeling for catastrophic events Present Position: Master student, Simon Fraser University
2021/9 - 2023/4 Academic Advisor	Hashan Peiris (In Progress) , Simon Fraser University Student Degree Expected Date: 2023/8 Thesis/Project Title: Prediction of auto insurance claim via data integration Present Position: PhD student, Simon Fraser University

Event Administration

2020/12 - 2022/1	Co-organizer, BIRS 2022 Conference - Emerging Insights in Insurance Statistics (22w5119 - Cancelled due to COVID-19), Conference, 2022/1 - 2022/1
2019/8 - 2020/3	Organizer, SIGMA Seminar, Seminar, 2019/8 - 2020/3

Committee Memberships

2022/3	Committee Member, SOA GI Research committee, Society of Actuaries Reviewing and evaluating the grant proposals for General Insurance researches supported by the SOA
2021/9	Committee Member, SOA Exam QFI QF committee, Society of Actuaries Writing and grading exam questions for an SOA exam, Quantitative Finance in FSA-Quantitative Finance and Investment track
2019/6	Committee Member, SOA Exam GI RR committee, Society of Actuaries Writing and grading exam questions for an SOA exam, Ratemaking and Reserving in FSA- General Insurance track

Other Memberships

2019/3	Fellow, Society of Actuaries

Presentations

1. (2023). Integration of Traditional and Telematics Data for Efficient Insurance Claims Predictions. Special Actuarial Research Seminar, East Lansing, United States of America
   Main Audience: Researcher
   Invited?: Yes, Keynote?: No
2. (2022). Multivariate claim count regression model with varying dispersion and dependence parameters. Research Seminar, School of Risk and Actuarial Studies, UNSW Business School, Sydney, Australia
   Main Audience: Researcher
   Invited?: Yes, Keynote?: No

3. (2022). Multivariate claim count regression model with varying dispersion and dependence parameters. Research Section Knowledge Sharing Session of IFoA, London, United Kingdom
Main Audience: Knowledge User
Invited?: No, Keynote?: No
4. (2021). Predictive compound risk models with dependence. Department of Statistics and Actuarial Science Seminar, Soongsil University, Seoul, Korea, South
Main Audience: Researcher
Invited?: Yes, Keynote?: No
5. (2021). Approximation of zero-inflated Poisson credibility premium via variational Bayes. 2021 Special Seminar of Korean Academy of Actuarial Science, Seoul, Korea, South
Main Audience: Researcher
Invited?: Yes, Keynote?: Yes
6. (2021). A non-convex regularization approach for stable estimation of loss development factors. Department of Statistics Seminar, Seoul National University, Seoul, Korea, South
Main Audience: Researcher
Invited?: Yes, Keynote?: No
7. (2021). Approximation of zero-inflated Poisson credibility premium via variational Bayes. The 56th Actuarial Research Conference, Chicago, United States of America
Main Audience: Researcher
Invited?: No, Keynote?: No
8. (2021). Equity Indexed Annuities with rebates. 24th International Congress on Insurance: Mathematics and Economics, Urbana, United States of America
Main Audience: Researcher
Invited?: No, Keynote?: No
9. (2021). A Non-convex Regularization Approach for Stable Estimation of Loss Development Factors. SIAM FM21 Conference, Philadelphia, United States of America
Main Audience: Researcher
Invited?: No, Keynote?: No
10. (2021). A non-convex regularization approach for stable estimation of loss development factors. Department of Statistics Seminar, Ewha Womans University, Seoul, Korea, South
Main Audience: Researcher
Invited?: Yes, Keynote?: No
11. (2020). Testing for random effects in compound risk models via Bregman divergence. 2020 Actuarial Research Conference, Lincoln, United States of America
Main Audience: Researcher
Invited?: No, Keynote?: No
12. (2020). A regularization approach for stable estimation of loss development factors. Online International Conference in Actuarial science, data science and finance, Lyon, France
Main Audience: Researcher
Invited?: No, Keynote?: No
13. (2020). Applications of random effects in dependent compound risk models. London School of Economics (LSE) Actuarial Science Seminar Series, London, United Kingdom
Main Audience: Researcher
Invited?: Yes, Keynote?: No
14. (2019). Testing for random effects in compound risk models via Bregman divergence. Simon Conference for Young Researcher in Risk Management and Insurance, East Lansing, United States of America
Main Audience: Researcher
Invited?: No, Keynote?: No

15. (2019). Premium optimization with policyholder loyalty. The 3rd International Congress on Actuarial Science and Quantitative Finance, Manizales, Colombia
Main Audience: Researcher
Invited?: No, Keynote?: No
16. (2019). Predictive compound random effects models for dependent frequency and severity. 2019 Spring Conference of Korean Statistical Society, Chuncheon, Korea, South
Main Audience: Researcher
Invited?: No, Keynote?: No
17. (2019). Premium optimization with policyholder loyalty. The 54th Actuarial Research Conference, Indianapolis, United States of America
Main Audience: Researcher
Invited?: No, Keynote?: No
18. (2019). Predictive compound random effects models for dependent frequency and severity. The 23rd International Congress on Insurance: Mathematics and Economics, Munich, Germany
Main Audience: Researcher
Invited?: No, Keynote?: No
19. (2018). Ratemaking application of Bayesian LASSO with conjugate hyperprior. The 53rd Actuarial Research Conference, London, Canada
Main Audience: Researcher
Invited?: No, Keynote?: No
20. (2018). Ratemaking application of Bayesian LASSO with conjugate hyperprior. 2018 Spring Conference of Korean Statistical Society, Busan, Korea, South
Main Audience: Researcher
Invited?: No, Keynote?: No
21. (2017). A predictive random effects model of dependent claims frequency and severity. Advances in Predictive Analytics (APA) Conference, Waterloo, Canada
Main Audience: Researcher
Invited?: No, Keynote?: No

Publications

Journal Articles

1. Tsz Chai Fung, Himchan Jeong, George Tzougas. (2023). Soft splicing model: Bridging the gap between composite model and finite mixture model. Scandinavian Actuarial Journal.
Revision Requested
Refereed?: No, Open Access?: No
2. Hashan Peiris, Himchan Jeong, Jae-Kwang Kim. (2023). Integration of Traditional and Telematics data for Efficient Insurance Claims Prediction. ASTIN Bulletin: The Journal of the IAA.
Submitted
Refereed?: No, Open Access?: No
3. Himchan Jeong, George Tzougas, Tsz Chai Fung. (2023). Multivariate claim count regression model with varying dispersion and dependence parameters. Journal of the Royal Statistical Society: Series A. 186(1): 61–83.
Published
Refereed?: Yes, Open Access?: No

4. Gee Y. Lee, Himchan Jeong. (2023). Nonparametric intercept regularization for insurance claim frequency regression models. Annals of Actuarial Science.
   Revision Requested
   Refereed?: No
5. Himchan Jeong. (2023). Tweedie multivariate semi-parametric credibility. Insurance: Mathematics and Economics.
   Submitted
   Refereed?: No, Open Access?: No
6. Jaeyoun Ahn, Himchan Jeong, Yang Lu. (2023). A simple Bayesian state-space model for the collective risk model. Scandinavian Actuarial Journal. 2023: 509-529.
   Published
   Refereed?: Yes, Open Access?: No
7. Himchan Jeong and Dipak K. Dey. (2022). Multi-peril frequency credibility premium via shared random effects. Variance.
   Accepted
   Refereed?: Yes, Open Access?: Yes
8. Minwoo Kim, Himchan Jeong and Dipak Dey. (2022). Approximation of Zero-Inflated Poisson Credibility Premium via Variational Bayes Approach. Risks. 10(3): 54.
   Published
   Refereed?: Yes, Open Access?: Yes
9. Himchan Jeong. (2022). Risk Aggregation for Measuring Required Capital via Copula-based Internal Models under K-ICS. Korean Journal of Insurance. 129: 51-77.
   Published
   Refereed?: Yes, Open Access?: Yes
10. Banghee So, Himchan Jeong. (2022). Simulation Engine for Adaptive Telematics data. Variance.
    Accepted
    Refereed?: Yes, Open Access?: Yes
11. Tianxing Yan, Himchan Jeong. (2022). Posterior ratemaking of compound loss using longitudinal data with EM algorithm. The Journal of Risk Management. 33(1): 1-34.
    Published
    Refereed?: Yes, Open Access?: Yes
12. Himchan Jeong. (2022). Dimension reduction techniques for summarized telematics data. The Journal of Risk Management. 33(4): 1-25.
    Published
    Refereed?: Yes, Open Access?: Yes
13. Hangsuck Lee, Himchan Jeong, Minha Lee. (2022). Multi-step Double Barrier Options. Finance Research Letters. 47(A)
    Published
    Refereed?: Yes, Open Access?: No
14. George Tzougas and Himchan Jeong. (2021). EM estimation for the Exponential Generalized Inverse Gaussian Regression model with varying dispersion and shape for modelling the aggregate claim amount. Risks. 9(1): 1-19.
    Published
    Refereed?: Yes, Open Access?: Yes
15. Himchan Jeong, Jaeyoun Ahn, Sojung Park, Emiliano A. Valdez. (2021). Generalized linear mixed models (GLMMs) for dependent compound risk models. Variance. 14(1)
    Published
    Refereed?: Yes, Open Access?: Yes

16. Himchan Jeong, Hyunwoong Chang, and Emiliano A. Valdez. (2021). A non-convex regularization approach for stable estimation of loss development factors. Scandinavian Actuarial Journal. 2021(9): 779-803.
Published
Refereed?: Yes

17. Rosy Oh, Himchan Jeong, Jaeyoun Ahn, Emiliano A. Valdez. (2021). A multi-year microlevel collective risk model. Insurance: Mathematics and Economics. 100: 309-328.
Published
Refereed?: Yes, Open Access?: No

18. Jaeyoun Ahn, Himchan Jeong, Yang Lu. (2021). On the ordering of credibility factors. Insurance: Mathematics and Economics. 101: 626-638.
Published
Refereed?: Yes, Open Access?: No

19. Himchan Jeong and Emiliano A. Valdez. (2020). Bayesian credibility premium with GB2 copulas. Dependence Modeling. 8(1): 157-171.
Published
Refereed?: Yes, Open Access?: Yes

20. Elizabeth D. Schifano, Himchan Jeong, Ved Deshpande and Dipak K. Dey. (2020). Fully and empirical Bayes approaches to estimating copula-based models for bivariate mixed outcomes using Hamiltonian Monte Carlo. TEST.
Published
Refereed?: Yes, Open Access?: No

21. Himchan Jeong and Emiliano A. Valdez. (2020). Predictive compound risk models with dependence. Insurance: Mathematics and Economics. 94: 182-195.
Published
Refereed?: Yes, Open Access?: No

22. Himchan Jeong. (2020). Testing for random effects in compound risk models via Bregman divergence. ASTIN Bulletin: The Journal of the IAA. 50(3): 777-798.
Published
Refereed?: Yes, Open Access?: No

23. Himchan Jeong and Dipak K. Dey. (2020). Application of vine copula for multi-line insurance reserving. Risks. 8(4)
Published
Refereed?: Yes, Open Access?: Yes

24. Himchan Jeong, Guojun Gan, Emiliano A. Valdez. (2018). Association rules for understanding policyholder lapse. Risks. 6(3)
Published
Refereed?: Yes, Open Access?: Yes

Conference Publications

1. Himchan Jeong, Bin Zou. (2022). A Dynamic Credibility Model Using Hawkes Processes. Proceedings of Winter Simulation Conference 2022. Winter Simulation Conference 2022, (3241-3250)
Paper
Published
Refereed?: Yes, Invited?: No