



**Date Submitted:** 2021-10-07 14:21:38

Confirmation Number: 1367452 Template: NSERC\_Researcher

# Professor Himchan Jeong

Correspondence language: English

### **Contact Information**

The primary information is denoted by (\*)

#### **Address**

Primary Affiliation (\*)

8888 University Drive Department of Statistics & Actuarial Science Simon Fraser University Burnaby British Columbia V5A 1S6 Canada

### **Telephone**

Mobile (\*) 1-236-9781502

#### **Email**

Work (\*) himchan\_jeong@sfu.ca





### **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

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.

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.

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.

### **User Profile**

# **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=1]

2021/4 - 2026/3 Insu 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 - 102,500

Funding Competitive?: Yes

# **Student/Postdoctoral Supervision**

#### Master's Thesis [n=1]

2021/9 - 2023/8 Hashan Peiris (In Progress), Simon Fraser University

Academic Advisor Student Degree Expected Date: 2023/8

Thesis/Project Title: Prediction of auto insurance claim via data integration

Present Position: Master student, Simon Fraser University

### **Event Administration**

2020/12 - 2022/1 Co-organizer, BIRS 2022 Conference - Emerging Insights in Insurance Statistics

(22w5119), Conference, 2022/1 - 2022/1

2019/8 - 2020/3 Organizer, SIGMA Seminar, Seminar, 2019/8 - 2020/3

### **Committee Memberships**

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. (2021). Predictive compound risk models with dependence. Department of Statistics and Actuarial Science Seminar, Soongsil University, Seoul, Korea, Republic of

Main Audience: Researcher Invited?: Yes, Keynote?: No

2. (2021). Approximation of zero-inflated Poisson credibility premium via variational Bayes. 2021 Special Seminar of Korean Academy of Actuarial Science, Seoul, Korea, Republic of

Main Audience: Researcher Invited?: Yes, Keynote?: Yes

3. (2021). A non-convex regularization approach for stable estimation of loss development factors.

Department of Statistics Seminar, Seoul National University, Seoul, Korea, Republic of

Main Audience: Researcher Invited?: Yes, Keynote?: No

4. (2021). Approximation of zero-inflated Poisson credibility premium via variational Bayes. The 56th Actuarial

Research Conference, Chicago, United States

Main Audience: Researcher Invited?: No, Keynote?: No

5. (2021). Equity Indexed Annuities with rebates. 24th International Congress on Insurance: Mathematics and

Economics, Urbana, United States

Main Audience: Researcher Invited?: No, Keynote?: No

6. (2021). A Non-convex Regularization Approach for Stable Estimation of Loss Development Factors. SIAM

FM21 Conference, Philadelphia, United States

Main Audience: Researcher Invited?: No, Keynote?: No

7. (2021). A non-convex regularization approach for stable estimation of loss development factors.

Department of Statistics Seminar, Ewha Womans University, Seoul, Korea, Republic of

Main Audience: Researcher Invited?: Yes, Keynote?: No

8. (2020). Testing for random effects in compound risk models via Bregman divergence. 2020 Actuarial Research Conference, Lincoln, United States

Main Audience: Researcher Invited?: No, Keynote?: No

9. (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

10. (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

11. (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

Main Audience: Researcher Invited?: No, Keynote?: No

12. (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

13. (2019). Predictive compound random effects models for dependent frequency and severity. 2019 Spring Conference of Korean Statistical Society, Chuncheon, Korea, Republic of

Main Audience: Researcher Invited?: No, Keynote?: No

14. (2019). Premium optimization with policyholder loyalty. The 54th Actuarial Research Conference,

Indianapolis, United States Main Audience: Researcher Invited?: No, Keynote?: No

15. (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

16. (2018). Ratemaking application of Bayesian LASSO with conjugate hyperprior. The 53rd Actuarial Research Conference, London, Canada

Main Audience: Researcher Invited?: No, Keynote?: No

17. (2018). Ratemaking application of Bayesian LASSO with conjugate hyperprior. 2018 Spring Conference of Korean Statistical Society, Busan, Korea, Republic of

Main Audience: Researcher Invited?: No, Keynote?: No

18. (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

19. (2015). Simple Compound Risk Model with Dependent Structure and its application to Bonus-Malus System. 2015 Fall Conference of Korean Statistical Society, Yongin, Korea, Republic of

Main Audience: Researcher Invited?: No, Keynote?: No

#### **Publications**

#### **Journal Articles**

1. 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

2. Himchan Jeong, George Tzougas, Tsz Chai Fung. (2021). Multivariate claim count regression model with varying dispersion and dependence parameters. Journal of the Royal Statistical Society: Series A. Revision Requested

Refereed?: Yes, Open Access?: No

3. Himchan Jeong, Hyunwoong Chang, and Emiliano A. Valdez. (2021). A non-convex regularization approach for stable estimation of loss development factors. Scandinavian Actuarial Journal. Published

Refereed?: Yes

4. 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

5. Jaeyoun Ahn, Himchan Jeong, Yang Lu. (2021). On the ordering of credibility factors. Insurance: Mathematics and Economics.

Revision Requested

Refereed?: Yes, Open Access?: No

6. Tianxing Yan, Himchan Jeong. (2021). Posterior ratemaking of compound loss using longitudinal data with EM algorithm. The Journal of Risk Management.

Submitted

Refereed?: No, Open Access?: No

7. 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

8. 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

9. Rosy Oh, Himchan Jeong, Jaeyoun Ahn, and Emiliano A. Valdez. (2020). On a multi-year collective risk model using copulas. Insurance: Mathematics and Economics.

Revision Requested

Refereed?: Yes

10. 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

11. Himchan Jeong and Dipak K. Dey. (2020). Multi-peril frequency credibility premium via shared random effects. Variance.

Submitted Refereed?: No

12. 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

13. Himchan Jeong, Jaeyoun Ahn, Sojung Park, Emiliano A. Valdez. (2020). Generalized linear mixed models (GLMMs) for dependent compound risk models. Variance.

In Press

Refereed?: Yes, Open Access?: Yes

14. 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

15. Himchan Jeong, Guojun Gan, Emiliano A. Valdez. (2018). Association rules for understanding policyholder lapse. Risks. 6(3)

Published

Refereed?: Yes, Open Access?: Yes