

YOUNGSUN KIM

Madison, WI

sundrop03@gmail.com ♦ +1 (608) 733-7373

<https://sundrop03.github.io>

SUMMARY

Dedicated academic with extensive experience in insurance consulting, predictive modeling, and business analytics. Ongoing research focuses on advanced learning in actuarial science, socioeconomic access to insurance, and insurance companies' responses to regulatory changes and natural hazard events. Proven success in developing and teaching courses in financial mathematics, risk management, and insurance theory, bridging theoretical concepts with practical applications. Committed to fostering student learning through interactive teaching methods and continuous feedback.

EDUCATION

University of Wisconsin-Madison

Ph.D. in Business (Risk Management and Insurance)

Madison, WI

August 2024

Georgia State University

M.S. in Actuarial Science

Atlanta, GA

May 2015

M.S. in Risk Management and Insurance

May 2015

Korea University

B.A. in Public Administration (*Minor: Economics*)

Seoul, Korea

February 2009

WORKING PAPERS

Kim, Y. and Bauer, D. (2023). Transfer Learning in the Actuarial Domain: Foundations and Applications, *Submitted*

Kim, Y. (2023). Insurance Agency Location: Revisiting Squires, Velez, and Taeuber (1991), *Submitted*

Kim, Y. and Bauer, D. (2024). Cross-subsidization in the Personal Insurance Markets, *Working paper*

TEACHING ACTIVITIES

Actuarial Science Methods II (ACT SCI 301)

Lecturer (SA) - Undergraduate course

Madison, WI

August 2020 - May 2024

- Developed and delivered two 75-minute lectures per week on financial mathematics, aimed at enhancing students' knowledge of mathematical tools for quantitatively assessing financial risk.

Machine Learning for Business Analytics (GB 656)

Teaching Assistant - Master's course

Madison, WI

August 2021 - December 2023

- An introduction to machine learning foundations, different methodological approaches, and implementation tools for machine learning for business applications. The methods include both supervised learning techniques as well as unsupervised learning techniques.
- Evaluated student assignments and coached over 130 students in coding (R, Python), focusing on developing predictive models and financial modeling skills. Held office hours to teach coding and to prepare students for Kaggle competitions.

Business Analytics II (GB 307)

Teaching Assistant - Undergraduate course

Madison, WI

August 2019 - May 2020

- Emphasis on hands-on experience with many commonly used analytic methodologies using the modeling and optimization tools with a focus on predictive and prescriptive analytics.
- Conducted two weekly 50-minute sessions, emphasizing quantitative analysis and data manipulation with Excel and Access. Introduced students to presentation skills using business intelligence tools (Tableau, Power BI).

Business Analytics I (GB 306)

Teaching Assistant - Undergraduate course

Madison, WI

August 2018 - May 2019

- Development of quantitative intuition through practical application and utilization of analysis tools, with an emphasis on hypothesis testing and regression analysis and include an introduction to simulation methods.
- Conducted a weekly 50-minute session guiding students through case studies, where they apply lecture concepts and gain hands-on experience with Excel analyses to solve business problems. Emphasized statistical literacy and effective communication of data analysis.

PRESENTATIONS

The 58th Actuarial Research Conference

Persistence of Insurance Redlining: Exploring distribution of insurance agencies and implications

Des Moines, IA

August 2023

The 57th Actuarial Research Conference

Transfer Learning in Actuarial Science: Primer and Applications

Champaign, IL

August 2022

HONORS & REWARDS

Actuarial Research Conference Honorable Mention

2023

Wisconsin School of Business Travel Award

2022, 2023

Wisconsin School of Business Distinguished Teaching Award

2020, 2021, 2022, 2023

Wisconsin School of Business Graduate Scholarship

2018 - 2022

SERVICE

Referee, Journal of Risk and Insurance

PROFESSIONAL EXPERIENCE

Samsung Fire & Marine Insurance

Graduate Intern

Seoul, Korea

July 2021

- Analyzed the current risk model and presented optimal risk capital management strategies to the Chief Actuary.
- Demonstrated flexibility with machine learning and explored its feasibility in risk rate analysis, presenting findings to leadership.

Willis Towers Watson

Actuarial Analyst

Seoul, Korea

December 2015 - May 2018

- Applied stochastic modeling for insurance risk, alongside customized risk calibration and economic capital modeling in a dynamic financial analysis project for a large P&C insurer.
- Served as the primary point of contact for communication with P&C insurers and regulatory authorities in the region. Additionally, led a proof of concept to automate the client's legacy system, aligning it with regulatory changes. This led to enhanced efficiency, improved governance, and a notable reduction in reporting time.
- Led solution sales to P&C insurers and served as the primary instructor for professional training sessions. Organized the inaugural industry-wide seminar, gathering insurance professionals and regulators to enhance company presence in the region.
- Conducted analyses on an insurer's claims and reserve assumptions as part of a Best Estimate analysis project. Additionally, updated and analyzed actuarial assumptions to compare the Embedded Value (EV) and appraisal value of an insurer.

Samjung Shipping

Operations Assistant

Seoul, Korea

January 2011 - December 2012

- Performed market analysis and updated the availability of optimal vessels in the open market to inform procurement decisions.
- Reviewed and processed extra insurance premiums for cargoes carried by over-aged vessels.

CERTIFICATIONS AND EXAMS

Society of Actuaries

- Passed Exam P, Exam FM, and Exam IFM
- Received transition credit for Exam SRM
- Passed the Pre-Actuarial Foundations (PAF) module
- Completed all VEE credits

TECHNICAL PROFICIENCIES

Software

MS Excel, Access, QGIS

Programming

R, Python, and VBA

Actuarial Software

MoSes, RiskAgility FM, Emblem, Igloo, and ResQ