YOUNGSUN KIM

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SUMMARY

Dedicated academic professional with extensive experience in insurance consulting, predictive modeling, and business analytics. Proven track record in developing and delivering undergraduate and graduate-level courses, focusing on risk management, actuarial science, and business analytics. Seeking an Assistant Professor position in Risk Management and Insurance to contribute to academic excellence and teaching.

EDUCATION

University of Wisconsin-Madison — Madison, WI
Ph.D. in Insurance Economics and Actuarial Analytics — *August 2024*

Georgia State University — Atlanta, GA
M.S. in Actuarial Science and Mathematical Risk Management (*Dual Degree Program*) — *May 2015*

Korea University — Seoul, Korea
B.A. in Public Administration (*Minor: Economics*) — *February 2009*

RESEARCH INTERESTS

Risk Management and Insurance, Predictive Modeling, Business Analytics, Actuarial Science

WORK IN PROGRESS

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

Kim, Y. (2023). Persistence of redlining: Agencies and applications, *Submitted*

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

TEACHING ACTIVITIES

Actuarial Science Methods II — Madison, WI
Lecturer (SA) - Undergraduate course — *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 — Madison, WI
Teaching Assistant - Master's course — *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 — Madison, WI
Teaching Assistant - Undergraduate course — *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 SQL databases. Introduced students to presentation skills using business intelligence tools (Tableau, Power BI).

Business Analytics I — Madison, WI
Teaching Assistant - Undergraduate course — *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.

HONORS & REWARDS

Actuarial Research Conference Honorable Mention	*2023*
Wisconsin School of Business Travel Award	*2022 - 2023*
Wisconsin School of Business Distinguished Teaching Award	*2019 - 2023*
Wisconsin School of Business Graduate Scholarship	*2018 - 2022*

PRESENTATIONS

The 58th Actuarial Research Conference — Des Moines, IA
Persistence of Insurance Redlining: Exploring distribution of insurance agencies and implications — *August 2023*

- Investigated the relationship between insurance agency locations and neighborhood racial composition, exploring variations between independent and exclusive agencies.

The 57th Actuarial Research Conference — Champaign, IL
Transfer Learning in Actuarial Science: Primer and Applications — *August 2022*

- Introducing transfer learning as a solution in insurance machine learning, leveraging knowledge from related previous problems and effectively applying it to tackle new but related challenges. GitHub Repository

PROFESSIONAL EXPERIENCE

Samsung Fire & Marine Insurance — Seoul, Korea
Graduate Intern — *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 (WTW) — Seoul, Korea
Actuarial Analyst — *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 conducted regular training sessions on Generalized Linear Models using the firm's pricing tools. Additionally, organized the inaugural industry-wide seminar, enhancing the company's presence in the region.
- Conducted analyses on the company'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 — Seoul, Korea
Operations Assistant — *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
Typesetting	LaTeX, Markdown