

BUOMSOO (RAYMOND) KIM

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PROFESSIONAL EXPERIENCE

- June 2023 - Present Assistant Professor of Information Systems and Business Analytics, Ivy College of Business, Iowa State University, Ames, IA, US
- Aug 2018 – May 2023 Research Assistant, Eller College of Management, University of Arizona, Tucson, AZ, US

EDUCATION

- Aug 2018 – May 2023 Eller College of Management, University of Arizona, Tucson, AZ, US
- Ph.D. in Management Information Systems
 - Dissertation title: *Computational Design Science Research to Solve Real-World Problems with High Impact* (Advisor: Dr. Sudha Ram)
- Mar 2016 – Feb 2018 Graduate School of Business, Seoul National University, Seoul, KR
- M.S. in Management Information Systems
- Mar 2008 – Feb 2016 SNU Business School, Seoul National University, Seoul, KR
- B.S. in Business Administration (*Summa Cum Laude*)

RESEARCH INTERESTS

- Domain** Healthcare, Mobile Applications
- Methodology** Human-AI interaction, Interpretable Machine Learning, Graph Analytics, Recommender Systems, Text Analytics, Field Experiments

REFEREED JOURNAL PUBLICATIONS

- **Kim, B.**, Srinivasan, K., Kong, S., Kim, J., Shin, C., and Ram, S., (2023) “ROLEX: A Novel Method for Interpretable Machine Learning using Robust Local Explanations”. *MIS Quarterly*, 47(3).
- **Kim, B.**, Park, J., Suh, J., (2020), “Transparency and accountability in AI decision support: Explaining and visualizing convolutional neural networks for text information”. *Decision Support Systems*, 134.
- Kong, S. H., Ahn, D., **Kim, B.**, Srinivasan, K., Ram, S., Kim, H., Hong, A. R., Kim, J. H., Cho, N. H., and Shin, C. S. (2020), “A Novel Fracture Prediction Model Using Machine Learning in a Community-Based Cohort”. *Journal of Bone and Mineral Research Plus*, 4(3).

WORKING PAPERS

- “Balancing Incentives and Interruptions: The Effect of Rewarded Ads on Mobile User Engagement” (with Wei Chen, Seokjun Yoon, and Sudha Ram)
- “Graph Representation Learning for Reciprocal Recommendation in IT-enabled Social Networks: Social Relations Model Approach” (with Kyuhan Lee, Sangpil Han, Donghyuk Shin, and Sudha Ram)
- “A Novel Graph Representation Learning Framework for Multiple Outcome Prediction in Critical Care” (with Karthik Srinivasan and Sudha Ram)

REFEREED CONFERENCES & WORKSHOPS

- **Kim, B.**, Lee, K., Shin, D., Han, S., and Ram, S., “Graph Representation Learning for Reciprocal Recommendation in IT-enabled Social Networks: Social Relations Model Approach”. *Workshop on Information Technologies and Systems*, Copenhagen, Denmark, 2022.
- **Kim, B.**, Lee, K., Shin, D., Han, S., and Ram, S., “Graph Representation Learning for Reciprocal

Recommendation in IT-enabled Social Networks: Social Relations Model Approach”. *INFORMS Workshop on Data Science*, Indianapolis, IN, US, 2022.

- **Kim, B.**, Lee, K., and Ram, S., “Theory-Driven Graph Representation Learning Method for Improving Environmental Impact Assessment”. *Workshop on Information Technologies and Systems*, Austin, TX, US, 2021.
- **Kim, B.**, Chen, W., and Ram, S., “Rewarded Advertising and Mobile User Engagement: A Large-Scale Field Experiment”. *Workshop on Information Technologies and Systems*, Austin, TX, US, 2021.
- **Kim, B.**, Srinivasan, K., and Ram, S., “Healthcare Predictive Analytics Framework for Short-term Multiple Disease Prediction in Critical Care”. *INFORMS Workshop on Data Science*, Virtual Event, 2021. (*Best Student Paper Award*)
- **Kim, B.**, and Ram, S., “Neural Collaborative Filtering with Content for Personalizing Mobile Healthcare Applications”. *Workshop on Information Technologies and Systems*, Munich, Germany, 2019.
- **Kim, B.**, Srinivasan, K., and Ram, S., “Robust Local Explanations for Healthcare Predictive Analytics: An Application to Fragility Fracture Risk Modeling”. *International Conference on Information Systems*, Munich, Germany, 2019.
- **Kim, B.**, and Park, J. “Identifying Semantically Similar Questions in Social Q&A Communities”. *Workshop on Information Technologies and Systems*, Seoul, Korea, 2017.

INVITED TALKS & PRESENTATIONS

- University of Arizona (Mar 2023), “ROLEX: A Novel Method for Interpretable Machine Learning using Robust Local Explanations”
- Iowa State University (Nov 2022), “ROLEX: A Novel Method for Interpretable Machine Learning using Robust Local Explanations”
- Arizona State University (Nov 2022), “Graph Representation Learning for Reciprocal Recommendation in IT-enabled Social Networks: Social Relations Model Approach”

ACADEMIC SERVICE

- **Journal reviewer:** Information Systems Research (ISR), Decision Support Systems (DSS), ACM Transactions on MIS (ACM TMIS), Frontiers in Big Data

TEACHING EXPERIENCE

Teaching Interests	Text Analytics, Social Network Analysis, Business Intelligence, Web Mining, Machine Learning, Database Management, Big Data Programming, Data Visualization
Technical Skills	Python, Java, R, Javascript, SQL, HTML, PowerBI, Tableau

Instructor, Ivy College of Business, Iowa State University

- [MBA/MS] MIS548: Data Wrangling (2023 Fall)

Instructor, Eller College of Management, University of Arizona

- [MBA/MS] MIS587: Business Intelligence (2022 Spring, 2023 Spring) [[Syllabus](#)]

Teaching assistant, SNU Business School, Seoul National University

- [Undergrad] 251.326: Management Information Systems (2016 Spring)
- [Undergrad] 251.212A: Introduction to Big Data Analytics for Management (2017 Fall)
- [MBA] 981.509: Information Technology (2016 Fall)
- [EMBA] 981.556: Emerging Technologies and Entrepreneurship (2016 Fall, 2017 Spring)
- [EMBA] 981.509: Information Technology (2017 Fall)

Teaching assistant, Big Data Institute, Seoul National University

- Fundamentals of Web Crawling and Text Data Analysis [[Course Material](#)]
- Introduction to Big Data Programming [[Course Material](#)]

Instructor, Urban Data Science Lab, Seoul National University

- Effective Decision Making with Unstructured Data Analytics [[Course Material](#)]
- Text and Social Media Analytics [[Course Material](#)]
- Data Mining and Recommender Systems

Teaching assistant, Urban Data Science Lab, Seoul National University

- Business Performance Management and Web Analytics [[Course Material](#)]
- Web Analytics and Marketing

AWARDS AND HONORS

2022	Student Scholarship (INFORMS Workshop on Data Science)
2021	Alan R. Dennis Travel Award (University of Arizona)
2021	Best Student Paper Award (INFORMS Workshop on Data Science)
2019	University of Arizona GPSC Travel Grant
2018-2022	Academic scholarship (Kwanjeong Education Foundation)
2016 Spring, Fall	Resident Advisor Scholarship (Gwanak Residence Halls, Seoul National University)
2016	<i>Summa Cum Laude</i> (Seoul National University)
2014 Spring, Fall	Academic scholarship (School of Commerce Scholarship Committee, Seoul National University)
2013 Fall	Dean's List of Seoul National University Business School
2009 Spring	Academic scholarship (Seoul National University Business School)
2008 Fall	Academic scholarship (Chungbuk HR Development Foundation)

REFERENCES

Available upon request