SUKWOONG CHOI

BB337, 1400 Washington Avenue, Albany, NY 12222 schoi27@albany.edu

ACADEMIC APPOINTMENTS

University at Albany, State University of New York Albany, NY, September 2023 - Present

Massry School of Business

Assistant Professor

Massachusetts Institute of Technology (MIT)

Cambridge, MA, July 2021 - August 2023

Sloan School of Management

Initiative on the Digital Economy (IDE)

Computer Science & Artificial Intelligence Laboratory (CSAIL)

Postdoctoral Scholar

AFFILIATIONS & PROFESSIONAL SERVICE

MIT FutureTech and IDE, Research Fellow AI Plus, University at Albany, SUNY, Faculty Affiliate 2023-2023-

EDUCATION

KAIST (Korea Advanced Institute of Science and Technology) Daejeon, Korea, June 2019 Ph.D., School of Business and Technology Management, College of Business (accredited by AACSB)

Northwestern University

Evanston, IL, Jan 2019 - Mar 2019

Kellogg School of Management, Management of Organizations (MORS)

Visiting Ph.D. Student (Sponsored by Professor Hyejin Youn)

University of California, Berkeley

Berkeley, CA, Jan 2018 - June 2019

Haas School of Business, Management of Organizations (MORS)

Visiting Ph.D. Student (Sponsored by National Research Foundation of Korea)

RESEARCH INTERESTS

- [1] Research Topics: Innovation, Entrepreneurship, and Economics of AI & Quantum Computing
- [2] Methodologies: Econometrics, Big-Data Analysis, Machine Learning, and Social Network Analysis

SELECTED JOURNAL ARTICLES

- [1] Choi, S., Kang, H., Kim, N., Kim, J. The Dual Edges of AI: Advancing Knowledge While Reducing Diversity *PNAS Nexus* Accepted, 2025
- Finalist for the Best Paper of the 2023 Conference on Information Systems and Technology (CIST)
- [2] Choi, S., Kang, H., Kim, N., Kim, J. How Does AI Improve Human Decision-Making? Evidence from the AI-Powered Go Program *Strategic Management Journal*, 2025
- Winner for the Best Interdisciplinary Paper Award Strategic Human Capital in the SMS 2021
- Media Cover: MIT IDE Blog, State of AI Report 2021, The Chosun Ilbo (Leading Korean Daily Newspaper)

- [3] Thompson, N., Dukatz, C., Shukla, P., **Choi, S.** Practical Quantum Computing is about More Than Just Hardware *California Management Review*, 2024
- [4] Choi, S., Kim, N., Kim, W. International Alliance Formation: The Effect of Technology Competition Networks *Journal of Business Research*, 2022
- [5] Lee, Y., Kim, T., **Choi, S.**, Kim, W. (*Equally contributed*)) When Does AI Payoff?: AI-Adoption Intensity, Complementary Investments, and R&D Strategy *Technovation*, 2022
- Media Cover: MIT Sloan, MIT IDE Research in Brief

SELECTED WORKING PAPERS

- [2] Choi, S., Moses, W. S., Thompson, N. The Quantum Tortoise and the Classical Hare: A simple framework for understanding which problems quantum computing will accelerate (and which it won't) Revise & Resubmit (Minor Revisions Requested), Proceedings of the IEEE
- [3] Woo, H., Choi, S., Kim, T. It Ain't Over 'Til It's Over: Post-IPO VC Ownership Effect on Innovation-Enhancing Investment of Newly Public Firms Revise and Resubmit, Journal of Management
- [4] Kim, T., **Choi, S.**, Park, G., Kim, N. How Does Trade Protectionism Affect AI Investment in Firms? Evidence from the US-China Trade War
- Winner of the Best Paper Award in the Korean Society for Innovation Management and Economics (KOSIME) Summer Conference 2024

ONGOING RESEARCH PROJECTS

- [1] How Does AI Improve Human Collaboration and Performance? Evidence from AI-powered X-ray Triage in University Hospitals (with H. Kang and N. Kim) Writing a draft
- [2] Quantifying the impact of AI on Science (with Y. Yin and M. Sun) Writing a draft
- [3] Algorithm Patents (with N. Thompson) Data collection
- [4] Stay the Course? The Effects of Government Matching R&D Funding on Tech Startups (with Y. Lee, T. Kim, and W. Kim) Working Paper

BOOK CHAPTERS

[1] Choi, Sukwoong. How is Artificial Intelligence Affecting Individuals and Organizations? In Digital Power 2023: A Future Society Led by Digital Innovation. HadA Press. 2022. (Written in Korean)

INVITED PRESENTATIONS, CONFERENCES, AND ACADEMIC PROGRAMS

2024-Present (includes scheduled; presented by co-author*): Economics of Quantum Information Technology Conference*; MIT NextTech Summit 2024; Korea Labor Institute; Software Policy & Research Institute; Google DeepMind*; MISQ Virtual Author Development Workshop; ISR Paper Development Workshop at ECIS 2024*

2023: University at Albany, SUNY; Stonybrook University, SUNY; Imperial College London; Economics of Quantum Information Technology Conference*; Druid 2023; AOM Annual Meetings; International Conference on Science of Science and Innovation (ICSSI); Conference on Information Systems and Technology (CIST); Informs Annual Meetings; 2023 Conference on Artificial Intelligence, Machine Learning, and Business Analytics; Software Policy & Research Institute

2022: Yonsei University; 3rd AI and Strategy Consortium; IP and Innovation (IPI) Seminar; the 2022 Wharton Technology and Innovation Conference; The Artificial Intelligence for Good Group (meetup, New York); 1st Wharton/Columbia Management, Analytics, and Data (MAD) Conference; Samsung

Advanced Institute of Technology (Targeted to Vice Presidents of Technology); the Work in the Age of Intelligent Machine (WAIM) Summer Conference; Carnegie School of Organizational Learning (CSOL) Academy; NBER Innovation Research Boot Camp; AOM Annual Meetings; STR Dissertation Consortium; Transatlantic Quantum Forum*; Northwestern University (Center of Science & Innovation (CSSI)); Bocconi University; Stevens of Institute Technology; 2022 Conference on Artificial Intelligence, Machine Learning, and Business Analytics; Cancelled due to Covid-19: 15th Digital Economics Conference (Toulouse, France); Could not attend due to Covid-19: the 5th Vienna Conference on Strategy, Organizational Design, and Innovation

2021: NBER Economics of Artificial Intelligence Conference; MIT IDE Fall Seminar; AOM Annual Meetings; SMS Annual Conference; Conference on Artificial Intelligence, Machine Learning, and Business Analytics; Yonsei University; NBER Doctoral Student Workshop on Economics of Artificial Intelligence; Could not attend due to Covid-19: DRUID (Copenhagen, Denmark)

2019-2020 & Before: AOM Annual Meetings (2020, 2017); SMS Annual Conference (2019, 2017); University of Kentucky Colloquium (2019); NBER Entrepreneurship Bootcamp (2018); STR Managing Your Dissertation Workshop (2018); INSEAD Doriot Entrepreneurship Conference (Poster, 2018); TIM Doctoral Student Consortium (2017); MIS summer program at Harbin Institute of Technology (2017); KAIST College of Business Colloquium (2017)

AWARDS, GRANTS, AND HONORS

- [1] 2023-24 Proposal Writing Course in University at Albany, SUNY (\$1,000)
- [2] Winner of the Best Paper Award in the Korean Society for Innovation Management and Economics (KOSIME) Summer Conference 2024
- [3] Finalist for the Best Paper of the 2023 Conference on Information Systems and Technology (CIST) (Top 5 out of 208 papers accepted from 337 submissions)
- [4] Co-principal investigator, USC Marshall Institute for Outlier Research in Business Grant Program "How Does AI Improve Human Decision-Making and Performance? Evidence from AI-powered X-ray Triage in University Hospitals" (with H. Kang and N. Kim) (2022-2023) (\$19,400)
- [5] NBER Grant for Summer Innovation Boot Camp (2022) (\$2,000)
- [6] Winner, Best Interdisciplinary Paper Award (Strategic Human Capital IG), SMS Conference (2021)
- [7] Kauffman Foundation Entrepreneurship Research to Practice Bootcamp (2020) (\$3,000) Cancelled due to Covid-19
- [8] NBER Grant for Summer Entrepreneurship Boot Camp (2018) (\$1,000)
- [9] National Research Funding (NRF) of Korea Fellowship for Social Science Korea All but Dissertation (2017) (\$22,000)
- [10] Winner, Best Paper Award, Asia-Pacific Journal of Business Venturing and Entrepreneurship (2017)
- [11] KAIST, College of Business Graduate Fellowships (2012-2016)

TEACHING EXPERIENCE

Analytics and Visualization (Graduate Course at Massey School of Business) Spring 2024, Instructor Rating 4.8/5

Topics in Business Analytics (Undergraduate Course at Massey School of Business) Spring 2024, Instructor Rating 4.2/5

Open Source Intelligence and Social Network Analysis (Graduate Course Instructor at Massey School of Business) Fall 2023, Instructor Rating 4.5/5

Mathematical Methods for Information Security (Graduate Course Instructor at Massey School of Business) Fall 2023, Instructor Rating 4.7/5

Managing Social and Organizational Networks (Undergraduate Course Instructor at Gatton B-School) Spring 2020 (Hybrid; Offline and Online Class), Instructor Rating 4.2/5

Social Dynamics and Network Analysis (MBA Course TA at Kellogg B-School) Winter 2019

Innovation and Technology Management (Graduate Course TA) Spring 2016, Fall 2016 Econometrics (Undergraduate Course TA) Spring 2015, Fall 2015

Organization Theory (Graduate Course TA) Spring 2014

Research Methodology I (Graduate Course TA) Spring 2013, Fall 2013

OTHERS

Academic Service

University at Albany, SUNY, Dep. Tenure Track Search Committee 2023-present

University at Albany, SUNY, Dep. Visiting Assistant Professor Search Committee 2024

Academy of Management, STR, ENT, and TIM Reviewer 2016-2021

SMS Annual Conference Reviewer 2022

Peer-Review Grant Referee: Swiss National Science Foundation

Peer-Review Journal Referee: Strategic Management Journal, Journal of Business Venturing, Strategic Management Review, Journal of Economic Growth, Journal of Strategy and Management, Applied Economics Letters, the Journal of the Royal Statistical Society: Series A, Korean Economic Review

Research Assistant

RA for Abhishek Nagaraj, Assistant Professor of UC Berkeley, Mar. 2018 - Dec. 2018

Project Name: Improving Data Access Democratizes and Diversifies Science. Published at Proceedings of the National Academy of Sciences (PNAS, A. Nagaraj, E. Shears, and M. de Vaan, 2020).

Programming

Languages: R, Python, Java Statistical packages: Stata

Network Analysis: iGraph (R/Python), NetworkX (Python), UCINET, Gephi

Support for Holding Academic Conferences

the 2015 AIEA-NBER conference, the 2022 Workshop on the Computational Foundations of Prosperity

PREVIOUS WORK EXPERIENCE

University of Southern California

Los Angeles, CA, July 2020 - July 2021

Viterbi School of Engineering

Technology Innovation and Entrepreneurship

Postdoctoral Scholar

University of Kentucky

Lexington, KY, July 2019 - June 2020

Gatton College of Business and Economics Department of Management

Postdoctoral Scholar

REFERENCES

Neil Thompson, MIT FutureTech and CSAIL, neil_t@mit.edu

Namil Kim, Graduate School of Information, Yonsei University, namil.kim@yonsei.ac.kr

Hyo Kang, SNU Business School, Seoul National University, hyokang@snu.ac.kr

Yong Suk Lee, Technology, Economy, and Global Affairs, University of Notre Dame, yong.s.lee@nd.edu

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