Dohun Lee

Ph.D. Student, Graduate School of Data Science, Seoul National University

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RESEARCH INTERESTS

Responsible AI, Innovation Dynamics, Causal Machine Learning

EDUCATION

Seoul National University Mar 2025 – Present
Ph.D. in Data Science
Advisor: Prof. Hyunwoo Park

Sungkyunkwan University Mar 2023 – Feb 2025
M.A. in Economics
Advisor: Prof. Jaesung Choi

Sungkyunkwan University Mar 2017 – Feb 2023
B.A. in Economics

PUBLICATIONS

*Equal contribution

International Conferences

From Text to Structure: The PACKaGE Benchmark for Bidirectional Causal Reasoning in Paragraphs and Graphs 2026
Juhyeon Kim, **Dohun Lee**, Jiwon Jang, Joseph Shim, Hyunwoo Park
EMNLP Main Conference

Faithful yet Collusive: Why Chain-of-Thought Monitoring Cannot Detect Collusion in LLM Pricing Agents under Oligopolistic Competition
Dohun Lee, Hyunwoo Park
Findings of EMNLP

Market Signal Injection: Adversarial Context Manipulation of LLM Pricing Agents
Dohun Lee, Hyunwoo Park
FinNLP 2026 Workshop @ EMNLP 2026

Ask It Instead: How Generative AI Hollowed Out Programming Knowledge Communities
Dohun Lee, Hyunwoo Park
2026 INFORMS Annual Meeting

R&D Tax Credits and Knowledge Spillovers: Causal Inference Under Network Interference
Dohun Lee, Hyunwoo Park
The 46th Annual Conference of the Strategic Management Society Research Methods Paper Prize
Knowledge & Innovation IG Best PhD Paper Runner-up PhD Paper Prize Nominee

Redefining Maritime Anomaly Detection via Equation-Grounded Synthetic Anomalies
Youngseok Hwang*, Sungho Bae*, **Dohun Lee**, Jaeeun Seo, Jeehong Kim, Wonhee Lee, Hyunwoo Park
KDD 2026 AI4Sciences Track Oral

Spillover-Robust Synthetic Control: Addressing Network Interference in Causal Inference
Dohun Lee, Hyunwoo Park
The 86th Annual Meeting of the Academy of Management

To Stay or To Leave? Prolonged Pendency and Inventor Enthusiasm
Dohun Lee, Hyunwoo Park
The 86th Annual Meeting of the Academy of Management

AISFlow: Boundary-Informed Flow Matching for Long-Term AIS Trajectory Imputation
Sungho Bae*, Youngseok Hwang*, Geonwoo Lee, Jaeeun Seo, **Dohun Lee**, Hyunwoo Park
ICML 2026 AI for Science Workshop

Who Wins from R&D Tax Credits? Treatment Effect Heterogeneity and Optimal Policy Design
Dohun Lee, Hyunwoo Park
DRUID26 Conference

Use of On-demand Media Services and Life Satisfaction among the Elderly in South Korea 2024
Dohun Lee, Jaesung Choi
The 77th WAPOR Annual Conference

Domestic Conferences

LLM 가격결정 에이전트의 Chain-of-Thought 충실성과 담합적 행동의 분리 현상 2026
Dohun Lee, Hyunwoo Park
대한전자공학회 2026년도 하계종합학술대회

LLM 가격 에이전트의 담합 유도 요인으로서의 In-context Learning 접근 연구
Dohun Lee, Hyunwoo Park
대한전자공학회 2026년도 하계종합학술대회

LLM 가격결정 에이전트에 대한 적대적 컨텍스트 조작 공격 연구
Dohun Lee, Hyunwoo Park
대한전자공학회 2026년도 하계종합학술대회

Spillover-Robust Synthetic Control: Addressing Network Interference in Causal Inference
Dohun Lee, Hyunwoo Park
한국경영과학회 2026 춘계공동학술대회

Propensity Thresholding Synthetic Control Robust to Geoeconomic Spillovers 2025
Dohun Lee, Hyunwoo Park
2025 한국데이터마이닝학회 하계학술대회

An LLM-Driven Interactive Framework for Conversational Baseball Analytics
Dokyung Lee*, Jaesung Ju*, **Dohun Lee**, Yoojin Jeong, Hyunwoo Park
2025 한국데이터마이닝학회 하계학술대회

Chat with Data: Enabling Reuse of Diabetes Patient Records via LLM-powered Dashboards
Yoojin Jeong, **Dohun Lee**, Jaesung Ju, Hyunwoo Park
2025 한국데이터마이닝학회 하계학술대회 Best Poster Award

Use of On-demand Media and Life Satisfaction among the Elderly in South Korea 2024
Dohun Lee
제12회 한국미디어패널 학술대회 1st Prize

New Media Use and Life Satisfaction among the Elderly
Dohun Lee, Jaesung Choi
제11회 불평등연구회 학술 심포지엄

WORKING PAPERS

Phantom Harm: Answer Extraction Brittleness Distorts the Measured Effect of Multi-Agent Debate
Dohun Lee, Hyunwoo Park
Under Review at AAAI-27 (Phase 2)

Does News Help LLM Financial Forecasting? A Paired Evaluation with Input Controls
Dohun Lee, Hyunwoo Park
Under Review at ARR 2026 October Cycle

When Color Carries Structure: Measuring and Repairing Chromatic Diagram Reading in Vision-Language Models
Dohun Lee, Hyunwoo Park
Under Review at ARR 2026 October Cycle

Learning Time-Varying Directed Graphs via Convex TV-Regularized Optimization and DAG Projection
Juhyeon Kim, **Dohun Lee**, Hyunwoo Park
Under Review at ICLR 2027

Not All Answer Revisions Are Equal: Interpreting the Representations and Controllability of Regressive and Progressive Sycophancy
Hyejin Jo*, **Dohun Lee***, Somangchan Park*, Hyunwoo Park, Hyopil Shin
Under Review at EACL 2027 (Short)

Causal-Grounded RAG with Structural Uncertainty Diagnostics
Juhyeon Kim, Sungho Bae, **Dohun Lee**, Hyunwoo Park
Under Review at ARR 2026 October Cycle

HONORS AND AWARDS

SMS Annual Conference Research Methods Paper Prize, Strategic Management Society — Oct 2026

SMS Knowledge and Innovation Interest Group Best PhD Paper Award (Runner-up), Strategic Management Society — Sep 2026

SMS Annual Conference PhD Paper Prize (Nominee), Strategic Management Society — May 2026

제12회 한국미디어패널 학술대회 (1st Prize), Korea Information Society Development Institute — Sep 2024

SKKU TA Award, Sungkyunkwan University — Jul 2024

SCHOLARSHIPS

Graduate Scholarship for Future Academic Generations (Specialized Fields), Seoul National University — Mar 2026 – Present
KRW 26,000,000 (one year)

BrainKorea21 (BK21) FOUR Fellowship, Sungkyunkwan University — Mar 2023 – Feb 2025
KRW 24,000,000 (KRW 1,000,000 per month for two years)

Graduate School Distinguished Scholarship (Type II), Sungkyunkwan University — Mar 2023 – Feb 2025
About KRW 7,000,000 (half tuition)

RESEARCH ASSISTANT

Patent Twins — Jan 2025 – Present
with Prof. Jeongsik Lee and Hyunwoo Park
Collection, refinement, and analysis of USPTO patent datasets.

Changes in the Labor Market for Lawyers since the Introduction of Law School — Oct 2024 – Dec 2024
with Prof. Jaesung Choi
Individual-level data collection using Selenium and R, collecting over 20,000 career records.

Current Status and Challenges of Data-Based Research in Economics — Aug 2023 – Dec 2023
with Prof. Jaesung Choi
Collection of 3,278 academic papers and evaluation of administrative data incorporation.
DOI: 10.22841/kjes.2024.72.1.001

TEACHING ASSISTANT

데이터사이언스 특강 (바이브 코딩), with Prof. Hyunwoo Park — Fall 2026

베리타스 강좌 2: 수학과 데이터 사이언스로 보는 사회와 경영, with Prof. Sun Hyun Park and Hyejin Youn — Spring 2026

2025 AI Careerpath Program, with Prof. Hyunwoo Park and Taesup Kim — Summer 2025

Data Science for Industrial Economics, with Prof. Hyunchul Kim — Fall 2024

2024 University of Sydney & SKKU Research Symposium, with Prof. Jaesung Choi and Hyunchul Kim — Jun 2024 – Sep 2024

KOSSDA Methods Crash Course, with Prof. Jaesung Choi — Jul 2023, Jul 2024

Economic Data Analysis, with Prof. Jaesung Choi — Spring 2023, Spring 2024

Global Economics Freshmen Seminar, with Prof. Jaesung Choi — Spring 2023, Spring 2024

Labor Economics and Data Science, with Prof. Jaesung Choi — Fall 2023

ACADEMIC SERVICE

Session Organizer, Decision Sciences Institute 2026 Annual Conference 2026
Innovation and New Product Development Track (Session Chair: Prof. Hyunwoo Park): “Data-driven Perspectives on New Product Strategy in Digital Platforms”
Supply Chain Management Track (Session Chair: Prof. Hyunwoo Park): “The Architecture of Supply: Network Structure and Resilience under Uncertainty”

Session Chair, INFORMS 2026 Annual Meeting 2026
Technology, Innovation, and Entrepreneurship SIG (with Prof. Hyunwoo Park): “Generative AI and the Future of Innovation”

Reviewer, Academy of Management Annual Meeting 2025, 2026
Technology and Innovation Management (TIM) Division, 2025, 2026
Strategic Management (STR) Division, 2025

External Reviewer, 한국생산운영관리학회지 2026
2026

MILITARY SERVICE

Republic of Korea Air Force, Republic of Korea Transportation Command Apr 2019 – Feb 2021