Suho Shin

Ph.D. Student at University of Maryland, College Park

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RESEARCH INTEREST

I'm broadly interested in the intersection of microeconomics, theoretical computer science and learning theory. This includes algorithmic game theory/mechanism design, information design, social learning/choice, and their interface with approximate/randomized/online algorithm, computational complexity, and multi-armed bandits.

EDUCATION

University of Maryland, College Park

Ph.D. in Computer Science

• Advisor: Prof. MohammadTaghi Hajiaghayi

Korea Advanced Institute of Science and Technology

M.S. in Electrical Engineering

• Advisor: Prof. Yung Yi

Korea Advanced Institute of Science and Technology

B.S. in Mathematical Sciences

Maryland, USA

Sep. 2022 –

Daejeon, South Korea

Mar. 2016 – Jan. 2018

Daejeon, South Korea

Mar. 2011 – Feb. 2016

PUBLICATION

 (α, β) denotes alphabetical order of authorship, which is common in theoretical computer science/econ/math community.

Replication-proof Bandit Mechanism Design

 $^{\alpha,\beta}$ S. Esmaeili, M. Hajiaghayi, S. Shin

Under review

Almost Tight Guarantees for Online Nash Social Welfare Maximization

 α,β K. Banihashem, M. Hajiaghayi, E. Martinez, S. Shin, M. Springer

Under review

Incentivizing Performance in Multi-Armed Bandits with Strategic Arms

 $^{\alpha,\beta}$ S. Esmaeili, S. Shin, A. Slivkins

Under review

A Regret Analysis of Repeated Delegated Choice

 $^{\alpha,\beta}M$. Hajiaghayi, M. Mahdavi, K. Rezaei, S. Shin

Under review

An Improved Relaxation for Oracle-Efficient Adversarial Contextual Bandits

 $^{\alpha,\beta}K$. Banihashem, M. Hajiaghayi, S. Shin, M. Springer

Under review

Bandit Social Learning under Myopic Agents

 $^{\alpha,\beta}K$. Banihashem, M. Hajiaghayi, S. Shin, A. Slivkins

Under review

Delegating to Multiple Agents

 $^{\alpha,\beta}M$. Hajiaghayi, K. Rezaei, S. Shin

EC'23

Multi-armed Bandit Algorithm against Strategic Replication.

S. Shin, S. Lee, J. Ok
AISTATS'22

S. Shin, H. Choi, Y. Yi, J. Ok SIGMETRICS'22

HONORS & AWARDS

Gradute School Summer Research Fellowship

USA

University of Maryland Summer 2023

Dean's Fellowship USA

University of Maryland Fall 2022 – Fall 2024

The National Scholarship for Science and Engineering

Korea Student Aid Foundation Spring 2011 – Fall 2017

South Korea

South Korea

Jul 2023

Oct. 2023

Jul 2023

Dean's Award for Entrance South Korea

Korea Advanced Institute of Science and Technology Spring 2011

Gold Medal, Korean Mathematical Olympiad

Korean Mathematical Society Fall 2008

VISITS & INTERNSHIPS

Visiting Student
University of Liverpool

Host: Prof. Piotr Krysta

Visiting Student SLMath, UC Berkeley

*Topic: Mathematics and Computer Science of Market and Mechanism Design*Jun 2023

Research Intern

Machine Learning Lab, Postech

Host: Prof. Jungseul Ok Summer 2022

ACADEMIC SERVICE

External Reviewer

NeurIPS'23,AISTATS'22

TALKS

Delegating to Multiple Agents

Arizona, USA

INFORMS Annual Meeting, Auctions and Market Design

Delegating to Multiple Agents

London, UK

ACM Conference on Economics and Computation (EC)

Power of Bonus in Pricing for Crowdsourcing Virtual

Proceedings of the ACM on Measurement and Analysis of Computing Systems (POMACS)

Jun. 2022

Multi-armed Bandit Algorithm against Strategic Replication Virtual

International Conference on Artificial Intelligence and Statistics (AISTATS)

Mar. 2022

Mechanism Design and Multi-armed Bandit

Virtual

Machine Learning Lab, Postech Feb. 2022

TEACHING

Design and Analysis of Computer Algorithms (CMSC451) <i>Teaching Assistant</i>	Spring 2023 UMD
Introduction to Computational Game Theory (CMSC474) Teaching Assistant	Fall 2022 UMD
Data Structure and Algorithms for Electrical Engineering (EE205) <i>Teaching Assistant</i>	Fall 2017 KAIST
Computer Networks (EE323) Teaching Assistant	Spring 2017 KAIST

INDUSTRY

LINE plus Corporation, LINE Advertisement Platform	Seongnam, South Korea
Data Scientist; Technical Research Personnel for Military Service	Oct. 2020 – Apr. 2022

Coupang, Product, Search and Discovery PlatformJamsil, South KoreaSoftware Engineer; Technical Research Personnel for Military ServiceAug. 2018 – Sep. 2020