

CONTACT INFORMATION

Graduate School of Data Science
Seoul National University
1 Gwanak-ro, Gwanak-gu, Seoul, South Korea, 08826

th.hwang@snu.ac.kr

RESEARCH INTERESTS

Sequential decision making, Statistical machine learning, Optimization for Machine Learning

EDUCATION

Seoul National University	Mar. 2020 - Present
Ph.D Candidate in Data Science	
Advisor: Min-hwan Oh	
Sungkyunkwan University	Sept. 2016 - Aug. 2018
M.S in Mathematics	
Advisor: Yongdo Lim / Co-advisor: Rhee Man Kil	
Thesis: Combination of Gaussian Kernel Function Networks for Traffic Flow Prediction	
Kyungpook National University	Mar. 2010 - Aug. 2016
B.S in Mathematics (Graduated with the highest honor)	
Minor: Business Administration	

EXPERIENCE

- **The Research Institute of Basic Science, Sungkyunkwan University**
Research Assistant Sept. 2018 - Feb.2020

PUBLICATIONS (* denotes equal contribution)

- [4] **Combinatorial Neural Bandits.**
Taehyun Hwang*, Kyuwook Chai*, and Min-hwan Oh
To appear, International Conference on Machine Learning (ICML), 2023
• Best Paper Award winner, Korean Artificial Intelligence Association 2022 Summer Conference
- [3] **Model-based Reinforcement Learning with Multinomial Logistic Function Approximation.**
Taehyun Hwang and Min-hwan Oh
Proceedings of the 37th AAAI Conference on Artificial Intelligence (AAAI), 2023.
• Oral presentation in main technical session
- [2] **Deep Learning Aided Evaluation for Electromechanical Properties of Complexly Structured Polymer Nanocomposites.**
Kyungmin Baek, **Taehyun Hwang**, Wonseok Lee, Hayoung Chung, and Maenghyo Cho
Composites Science and Technology, 109661, 2022.
- [1] **Estimation of Jamming Parameters based on Gaussian Kernel Function Networks.**
Taehyun Hwang, Rhee Man Kil, Hyun Ku Lee, Jung Ho Kim, Jae Heon Ko, Jeil Jo, and Junghoon Lee
Journal of the Korea Institute of Military Science and Technology 23 (1), 1-10, 2020.

PROJECTS

- Development of analysis model to explore test process equipment combination and improve flexible test performance.
Director: Prof. Min-hwan Oh Mar. - Sep. 2022
Funded by *SK hynix*
- A Study on the Algorithms for Estimating the Parameters of Autonomous Jamming Technique.
Director: Prof. Rhee Man Kil Apr. - Dec. 2018
Funded by *Agency for Defense Development* and *LIG Nex1*

- An Industrial Problem Solving Project Using Mathematical Data Analysis.

Director: Prof. Yongdo Lim

May. - Sept. 2017

Funded by *National Institute for Mathematical Sciences*

TALKS

“Model-based Reinforcement Learning with Multinomial Logistic Function Approximation”

- AAAI 2023, Washington D.C. Feb. 2023
- KAIA & NAVER 2022 Fall Conference, NAVER 1784 (Seungnam) Nov. 2022
- INFORMS 2022 Annual meeting, Indianapolis Oct. 2022

“Combinatorial Neural Bandits”

- KDMS 2022 Summer Conference, Busan Aug. 2022
- KAIA 2022 Summer Conference, Jeju Aug. 2022
- INFORMS 2021 Annual meeting, Anaheim (Virtual) Oct. 2021

“A Gaussian Kernel Function Network for Traffic Flow Prediction”

- KMS 2019 Annual meeting, Hongik University Oct. 2019

“Mathematics and Machine learning”

- Special lecture for undergraduate students, Kongju National University Sept. 2019

SCHOLARSHIPS AND AWARDS

- AAAI Student Scholarship, AAAI Feb. 2023
- Best Paper Award, Korean AI Association Conference Aug. 2022

TEACHING EXPERIENCE

- **Teaching Assistant** at Seoul National University
Data Science & Reinforcement Learning, Foundation of Data Science, Math for Data Science
- **Teaching Assistant** at Sungkyunkwan University
Calculus I/II, Linear Algebra, Discrete Mathematics, Topics in Algebra (Lie Algebra)

ACADEMIC SERVICES

- **Conference Reviewer**
ICML 2023
NeurIPS 2022, 2023