

## 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 under uncertainty, 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

## PREPRINT PAPERS (\* denotes equal contribution)

---

- [1] **Combinatorial Neural Bandits**  
**Taehyun Hwang\***, Kyuwook Chai\*, and Min-hwan Oh  
Under review
- Best Paper Award winner, Korean Artificial Intelligence Association 2022 Summer Conference
  - The 1st GSDS InnoJam Poster Awards, Seoul National University

## PUBLICATIONS (\* denotes equal contribution)

---

- [3] **Model-based Reinforcement Learning with Multinomial Logistic Function Approximation.**  
**Taehyun Hwang** and Min-hwan Oh  
To appear *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

---

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)  
*Funded by National Institute for Mathematical Sciences*

May. - Sept. 2017

## TALKS

---

- “Model-based Reinforcement Learning with Multinomial Logistic Function Approximation”*  
KAIA & NAVER 2022 Fall Conference, NAVER 1784 (Seungnam) November 2022  
INFORMS 2022 Annual meeting, Indianapolis October 2022
- “Combinatorial Neural Bandits”*  
KDMS 2022 Summer Conference, Busan August 2022  
KAIA 2022 Summer Conference, Jeju August 2022  
INFORMS 2021 Annual meeting, Anaheim (Virtual) October 2021
- “A Gaussian kernel function network for traffic flow prediction”*  
KMS 2019 Annual meeting, Hongik University Oct. 26, 2019
- “Mathematics and Machine learning”*  
Special lecture for undergraduate students, Kongju National University Sept. 24, 2019

## SCHOLARSHIPS AND AWARDS

---

- AAAI Student Scholarship, AAAI Feb. 2023
- Best Paper Award, Korean AI Association Conference Aug. 2022
- GSDS InnoJam Poster Awards, Seoul National University Mar. 2021

## 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

---

- **Program Committee & Reviewer**  
ICML 2023, NeurIPS 2022