

SeungBum Ha

Ph.D student

UNIST, Ulsan National Institute of Science and Technology

50 UNIST-gil, Eonyang-eup, Ulju-gun, Ulsan

ethereal0507@unist.ac.kr & ethereal0507@gmail.com

+82) 010-6630-8157

<https://github.com/Seung-B>

EDUCATION

Mar. 2019 ~	Ulsan National Institute of Science and Technology	Ulsan,
Aug. 2022	Department of Industrial Engineering	Korea
	<i>Advisor: Sunghoon Lim</i>	
	<i>B.S. in Industrial Engineering</i>	
	GPA: 3.7 / 4.3	
	<i>Cum Laude</i>	
Aug. 2022 ~	Ulsan National Institute of Science and Technology	Ulsan,
Aug. 2024	Graduate School of Artificial Intelligence	Korea
	<i>Advisor: Sung Whan Yoon</i>	
	<i>M.S. in Artificial Intelligence</i>	
Sep. 2024 ~	Ulsan National Institute of Science and Technology	Ulsan,
Present	Graduate School of Artificial Intelligence	Korea
	<i>Advisor: Sung Whan Yoon</i>	
	<i>Ph.D. Student</i>	
	GPA: 3.88 / 4.3	

RESEARCH INTERESTS

- Deep learning
- Federated learning
- Trustworthy AI
- Machine Unlearning
- Large Model Safety

PUBLICATIONS

1. Jin Hyuk Lim*, **SeungBum Ha***, Sung Whan Yoon, "MetaVers: Meta-Learned Versatile Representations for Personalized Federated Learning", *Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision*, (2024)
2. **SeungBum Ha***, Taehwan Lee*, Jiyoun Lim, Sung Whan Yoon, "Benchmarking federated learning for semantic datasets: Federated scene graph generation", *Pattern Recognition Letters* 197, 195-

3. **SeungBum Ha**, Saerom Park, "Unlearning's Blind Spots: Over-Unlearning and Prototypical Relearning Attack", *arXiv preprint.(Under Review)*, (2025)

PATENTS

1. Sung Whan Yoon, Jinyuk Lim, **SeungBum Ha**, "Meta-learning algorithms for personalized federated learning", KR-Application No. 10-2023-0037350

AWARDS AND HONORS

- The 1st KUIAI Hackathon, Excellence Award (2nd), Korea University, Korea (Jan. 2021)
- Data Science Contest, Encouragement prize, UNIST, KAIST, POSTECH, Korea (Jan. 2022)
- Undergraduate Full Scholarship, Ulsan National Institute of Science and Technology, Korea (Feb. 2019 ~ Aug. 2022)
- Graduate Full Scholarship, Ulsan National Institute of Science and Technology, Korea (Aug. 2022)

ACADEMIC SERVICES

- Served as Reviewer
 - The Thirteenth International Conference on Learning Representations (ICLR 2025)
 - The Fourteenth International Conference on Learning Representations (ICLR 2026)
 - The IEEE/CVF Conference on Computer Vision and Pattern Recognition 2026 (CVPR 2026)
 - The Eighteenth European Conference on Computer Vision (ECCV 2026)

PROJECTS

- Optimization of AI-based fusion manufacturing process conditions and prediction of defects, Seoyeon E-hwa / Inter-X, Korea (Jun. 2020 ~ Feb. 2021)
- Energy Consumption Analysis for Additive Manufacturing, Ulsan National Institute of Science and Technology UDMML Lab, Korea (Jul. 2020 ~ Jul. 2021)
- Manufacturing Bigdata Analysis based Smart Factory and advanced project - anomaly detection based on manufacturing process data, Hankuk Mold, Korea (Nov. 2020 ~ Feb. 2021)
- Predicting stock price volatility in the U.S. Market based on news using FinBERT, AICP Program, Ulsan National Institute of Science and Technology, Korea (Mar. 2021 ~ Dec. 2021)
- Development of feasibility verification technology for resource hidden deep learning model, ETRI(Electronics and Telecommunication Research Institute, Korea (Apr. 2023 ~ Nov. 2023)
- Building experimental environments based on multi-inference performance based federated learning asynchronous consensus, ETRI(Electronics and Telecommunication Research Institute, Korea (Jun. 2023 ~ Nov. 2023)
- Hierarchical federated learning simulations and clients contribution measurement, ETRI(Electronics and Telecommunication Research Institute, Korea (Jun. 2024 ~ Nov. 2024)

TEACHING EXPERIENCES

- Teaching Assistant, AI Novatus Academia Curriculum in Gyeongsangnam-do (Sep. 2022 ~ Feb. 2023)

- Teaching Assistant, Advanced Topics in Industrial Engineering - Introduction to AI Safety (UNIST, IE47001, Mar. 2024 ~ Jun. 2024)
- Teaching Assistant, Distributed Learning (UNIST, AI51501, Sep. 2024 ~ Dec. 2024)

RESEARCH EXPERIENCES

- Research Intern at Unstructured Data Mining and Machine Learning Lab, Ulsan National Institute of Science and Technology, Korea (May. 2020 ~ Dec. 2021)
- Research Intern at Homomorphic Encryption Lab, Ulsan National Institute of Science and Technology, Korea (Dec. 2021 ~ Jul. 2022)
- Research Student at Machine Intelligence and Information Learning Lab, Ulsan National Institute of Science and Technology, Korea (Aug. 2022 ~ Present)