

MINHO CHOI

M.S. student
Hanyang Univeristy
minhochoi@hanyang.ac.kr

EDUCATION

Mar. 2026 ~ Present	Hanyang University Department of Industrial & Management Engineering <i>Advisor: Kyung-Min Seo</i> <i>Master Student</i> GPA: 4.33 / 4.5	Seoul, Korea
Mar. 2019 ~ Feb. 2026	Hanyang University Department of Industrial & Management Engineering Thesis: A HILS(Human-In-the-Loop Simulation) and LLM(Large Language Model)-based DRT Operation Platform Integrating Virtual and Real Demand <i>Advisor: Kyung-Min Seo</i> <i>B.S. in Industrial & Management Engineering</i> GPA: 4.1 / 4.5 <i>Summa Cum Laude</i>	Ansan, Korea

RESEARCH INTERESTS

- Multi-paradigm simulation
- Simulation based optimization
- Digital twin simulator validation and calibration
- Multi robot path planning

PUBLICATIONS

1. **Min-Ho CHOI**, Jun-Woo KIM, Seon-Woo LEE, Kyung-Min SEO, "A Simulation Framework for DRT Operations with AI Persona-Based Virtual Demand and Real-Time HILS Integration", Journal of the Korea Society for Simulation, Vol. 35, No. 2., (2026)

CONFERENCES

1. **Min-Ho CHOI**, Im-Seok LEE, Jin-Hyun SUNG, and Kyung-Min SEO. "A DEVS-Based Simulation Framework for Evaluating Path Planning Algorithms in Autonomous Mobile Robots." 2026 Spring Joint Conference of the Korea Society for Simulation, Seoul, Korea (June. 2026) - Oral
2. Ji-Min Woo, Hoon KIM, Je-Guk HONG, **Min-Ho CHOI**, Dong-Wook Kim, Min-Seok Ko, Kyung-Min SEO, "Automated Generation of an Omniverse Digital Twin Based on Machine Cycle Charts

for Virtual Commissioning", 2026 Winter Conference of the Society for Computational Design and Engineering, PyeongChang, Korea (Feb. 2026) - Oral

3. **Min-Ho CHOI**, Jun-Woo KIM, Seon-Woo LEE, Kyung-Min SEO, "A Demand-Responsive Transit Operations Framework Integrating AI Persona-Based Virtual Demand with Human-in-the-Loop Simulation", 2025 Fall Conference of the Korea Society for Simulation, Seoul, Korea (Dec. 2025) - Oral
4. Hoon KIM, Ji-Min WOO, Je-Kuk HONG, **Min-Ho CHOI**, Dong-Wook KIM, Min-Seok KO, Kyung-Min SEO, "An Isaac Sim-Based Virtual Commissioning System for Validating Machine Cycle Chart Operations", 2025 Fall Conference of the Korea Society for Simulation, Seoul, Korea (Dec. 2025) - Oral

PATENTS

1. Kyung-Min SEO, Jun-Woo KIM, **Min-Ho CHOI**, Seon-Woo LEE, "Demand-Response Transport Simulation System", KR-Application No. 10-2025-0199264

EXPERIENCES

- Research Intern at Korea Additive Manufacturing Innovation Center, KITECH, Korea (Dec. 2024 ~ Feb. 2025)
- Research Intern at DAIM Lab., KAIST, Korea (Jun. 2025 ~ Aug. 2025)
- Teaching Assistant in Programming Languages at Hanyang University, Korea (Sep. 2025 ~ Dec. 2025)
- Teaching Assistant in Programming and Algorithms at Hanyang University, Korea (Mar. 2026 ~ Jun. 2026)

AWARDS AND HONORS

- Second Prize, Industrial AI Manufacturing Innovation Hackathon, Korea Institute for Advancement of Technology (KIAT), Korea (Aug. 2026)
- First Prize, AI × Robotics Hackathon, 2025, XYZ, Korea (Apr. 2026)
- Third Prize, Paper Presentation Competition, 2025 Fall Conference of the Korea Society for Simulation, Korea (Dec. 2025)
- Third Prize and President's Award, 2025 Hanyang Tutoring Program, , Hanyang University, Korea (Dec. 2025)
- Third Prize, Capstone Design Fair, College of Engineering, Hanyang University, Korea (Sep. 2025)
- Hanyang Brain Scholarship (Academic Excellence), Hanyang University, Korea (Mar. 2025)
- Practical Talent Tuition Reduction Award, Hanyang University, Korea (Sep. 2024)
- Special Academic Excellence Scholarship, Hanyang University, Korea (Mar. 2024)
- Hanyang Brain Tuition Reduction Award (Academic Excellence), Hanyang University, Korea (Mar. 2021)

PROJECTS

- Development of a Digital Twin-Based Virtual Commissioning Solution, LG Electronics, Korea (Sep. 2025 ~ Dec. 2025)
- Development of an AI Model for Tool and Equipment Offset Optimization, WAFF, Korea (Sep. 2025 ~ Jan. 2026)

- Development of an Operational Optimization Simulator for Manufacturing Depots, LG Electronics, Korea (Mar. 2026 ~ Present)
- Simulation-Based Analysis of Combat Effectiveness Considering Unmanned Assets, Hanhwa Ocean, Korea (Jul. 2026 ~ Present)

SKILLS AND CERTIFICATES

- Python
- SIMIO
- R
- TOEIC (945)