



Chanwoo Moon

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Research Interests: Behavior Prediction · Motion Planning for AVs in Mixed Traffic ·
AI-Based Transportation Simulation · Sim-to-Real · Closed-Loop Simulation

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST) <i>M.S. in Mobility, Cho Chun Shik Graduate School of Mobility (Advisor: Prof. Inhi Kim)</i>	Daejeon, Korea Mar. 2026 – Feb. 2028 (expected)
Yonsei University <i>B.S. in Urban Planning and Engineering, Minor in Applied Statistics; GPA 3.96/4.5</i>	Seoul, Korea Mar. 2020 – Feb. 2026
Relevant Coursework: Traffic Engineering, Future Mobility, Urban Mobility Analysis and Planning, Mobility Data Mining, Linear Algebra, Mathematical Statistics, Statistical Methodology, Time Series Analysis, Network Data Analysis, Generative Models, Reinforcement Learning	

EXPERIENCE

Stellar Vision Inc. – Data Analysis / AI Researcher Intern	Dec. 2024 – Feb. 2025
- Managed the training-data pipeline for satellite computer-vision models, from SAR and optical imagery preprocessing to object labeling. - Preprocessed, analyzed, and managed SAR and geospatial data (QGIS).	
Yonsei University, Transportation Planning Lab – Undergraduate Research Intern	Jul. 2024 – Aug. 2024
- Participated in the Korea Transportation Safety Authority (TS) project on advanced mobility status survey and data analysis. - Collected mobility data through web crawling and analyzed it for the project report.	

PROJECTS

Physical AI and Infrastructure-Centered AV Control Framework for Heterogeneous Mixed Autonomous Traffic	Aug. 2026 – Present
- Funded by the National Research Foundation of Korea (NRF); Participating Researcher. - Responsible for literature review.	
World Foundation Model-Based E2E Autonomous Driving and Real-Vehicle Global Demonstration	Jul. 2026 – Present
- Funded by the Korea Technology and Information Promotion Agency for SMEs (TIPA); Participating Researcher. - Responsible for related research and paper writing.	
Metaverse-Based Virtual Testing Environment and Demonstration Technology for Autonomous Driving	May 2026 – Present
- Funded by the Korea Agency for Infrastructure Technology Advancement (KAIA); Participating Researcher. - Joined in the final phase; responsible for managing living-lab demonstration data.	
Yonsei Capstone Project <i>AI-Based Demand Modeling for Autonomous Ride-Hailing</i>	Sep. 2025 – Jul. 2026
- Proposed an AI-based framework (persona simulation) for autonomous ride-hailing demand and built a multi-agent framework. - Completed the research at KAIST with an evaluation framework as joint Yonsei-KAIST work, submitted to Transportation Research Part C (under review).	
Marketing Solution Agent for Small Merchants <i>13th BigContest, AI Data Utilization Track</i>	Sep. 2025 – Dec. 2025
- Built a multi-agent LLM system that diagnoses each small merchant's situation from card-sales, foot-traffic, and street-view data and recommends tailored marketing strategies. - Won the Best Award, KAIT President's Award (2nd of 500+ teams).	
Upstage Industry-Academia Project <i>RAG Agent for Counseling-Record Analysis</i>	May 2025 – Jun. 2025
- Built a RAG agent that parses and anonymizes scanned counseling-record PDFs, retrieves similar cases, and classifies risk level and abuse type (Upstage Document Parse, Solar LLM, FAISS). - Implemented automatic alerts for high-risk cases and a Streamlit monitoring dashboard.	
Namdaemun Market Night-Time Revitalization <i>12th BigContest, Data Analysis Track</i>	Sep. 2024 – Dec. 2024
- Used SKT mobility (OD), commercial, and parking data to find the problem (Namdaemun Market losing visitors in the evening), derive its causes (early closing, parking shortage), and propose solutions (a night-market district and new parking sites). - Won the Best Award, KAIT President's Award (2nd of 200+ teams).	

PUBLICATIONS & PRESENTATIONS

[Under Review] C. Moon, K. Zhang, J. Oh, I. Kim, J. Kim. “Beyond Choice Prediction: A Multidimensional Evaluation of Behavioral Alignment in Fine-Tuned LLM-Based Travel Behavior Models.” *Transportation Research Part C: Emerging Technologies*.

Oral presentation of the above work, *ITS World Congress 2026*, Gangneung, Korea (scheduled Oct. 22, 2026).

C. Moon, S. Moon, I. Kim, J. Kim. “Forecasting Demand Before Introducing New Mobility Services under Choice-Set Expansion: RP–SP Anchoring and Latent Restoration.” *Korean Society of Transportation Conference*, poster, 2026.

HONORS & AWARDS

Honorable Mention , 16th DB Insurance & Finance Contest (DB IFC), DB Kim Jun-ki Cultural Foundation	May 2026
• Paper track, top 5%; paper on demand and impact forecasting for autonomous vehicles	
Grand Prize , ST–Yonsei Capstone Design, Yonsei University RISE Project Group	Feb. 2026
• Capstone on pre-deployment demand forecasting for autonomous ride-hailing (1st place)	
President’s Award , Korean Society of Transportation	Jan. 2026
• Selected as Yonsei University’s 2026 outstanding graduate in transportation	
President’s Award , Korean Society of Transportation	Dec. 2025
• Top capstone in Yonsei Urban Planning & Engineering (autonomous ride-hailing demand modeling)	
Best Award , 13th BigContest AI Data Utilization Track, Korea Association for ICT Promotion (KAIT)	Dec. 2025
• KAIT President’s Award; marketing solution agent for small merchants (2nd of 500+ teams)	
Grand Prize , LLM Query Hackathon, Yonsei College of AI, SW-Centered University Project Group & Upstage	Nov. 2025
• Improved Korean grammatical error correction on Solar Pro with Graph-of-Thoughts prompting (1st of 20 teams)	
Encouragement Award , 2025 Seongnam Public Data Utilization & Analysis Idea Contest, City of Seongnam	Jun. 2025
• AI-agent investment-sourcing platform based on an analysis of Seongnam startups (4th of 96 teams)	
Best Award , Yonsei AGI Agent Hackathon, Yonsei SW-Centered University Project Group & Upstage	Apr. 2025
• Multi-agent auto insurance consultation simulator with GraphRAG over policy documents (2nd of 19 teams)	
Encouragement Award , 2024 National Land & Urban Data Idea Contest, Korea Land & Housing Corp. (LH)	Mar. 2025
• Vacancy-factor analysis of knowledge-industry centers and new-town demand forecasting (3rd of 71 teams)	
Academic Excellence Award , College of Engineering, Yonsei University	Feb. 2025
• Top grades in Fall 2024 (term GPA 4.19/4.5)	
Best Award , 12th BigContest Data Analysis Track, Korea Association for ICT Promotion (KAIT)	Dec. 2024
• KAIT President’s Award; Namdaemun Market night-time decline: problem discovery and solutions (2nd of 200+ teams)	

CERTIFICATIONS & TRAINING

Global R&D Challenge , Korea Institute of Human Resources Development in S&T (KIRD)	Jul. 2026 – Present
Hyundai Motor Group H-Mobility Class , Autonomous Driving (Decision & Control)	Apr. 2025 – Jun. 2025
ADsP (Advanced Data Analytics Semi-Professional), Korea Data Agency	Feb. 2024
Class 1 Ordinary Driver’s License	Feb. 2022

ACTIVITIES

Upstage Education Team – AI Education Teaching Assistant	Oct. 2025 – Dec. 2025
• Supported two rounds of a smart-farm polar-plant cultivation and generative-AI data analysis program for high-school students, run with the Incheon Office of Education and the Korea Polar Research Institute.	
YCC (Yonsei Computer Club) – Member	Jun. 2025 – Feb. 2026
YBIGTA (Yonsei Big Data Society) – Data Analytics Team Lead	Jul. 2024 – Feb. 2026
• Carried out data-analysis and ML/DL studies, industry-collaboration projects, and society projects.	
YTX (Yonsei Transportation Engineering & Analytics Society) – Member	Jul. 2024 – Feb. 2026
• Took part in seminars and discussions on smart mobility and data-driven transportation solutions.	
VECTOR, Yonsei College of Engineering Student Council – Planning & Editorial Staff	Jan. 2021 – Nov. 2021
• Planned college events and edited student-council communications.	

SKILLS

Programming: Python, R, SQL, HTML
Software: SUMO, VISSIM, EMME 4, VISUM, QGIS, Unity
AI: PyTorch, scikit-learn, Codex, Claude Code