

Eunchong Kim



✉ ekim01@unist.ac.kr / justinkim7577@gmail.com

☎ 010-7577-0596

🌐 [Personal Website](#)

RESEARCH INTEREST	AI-based End-to-End Autonomous Driving & Perception Systems for Robotics	
EDUCATION	Ulsan National Institute of Science and Technology (UNIST)	Ulsan, Republic of Korea
	M.S. in Artificial Intelligence	Sep. 2023 – Current
	<ul style="list-style-type: none">GPA: 4.05Advisor: Prof. Jeong hwan Jeon (Robotics and Mobility Lab.)Thesis: End-to-End Autonomous Driving: Deployment-Oriented and Rule-Conformant Design	
	Jacobs University Bremen (Currently Constructor Univeristy)	Bremen, Germany
	B.Sc. in Robotics and Intelligent Systems	Sep. 2020 – Jun. 2023
	<ul style="list-style-type: none">GPA: 1.52 / 1.0 (German Scale) \approx 3.5 / 4.0 (U.S. GPA)Advisor: Prof. Francesco MaurelliThesis: Event-Based Motion Segmentation and Stereo Feature Matching in Highly Cluttered Environments (Collaborative research with WasteAnt GmbH)Major RepresentativeMerit-based Scholarship (€5,000 per year)	
PUBLICATIONS	First author. “Deployment-Oriented End-to-End Autonomous Driving: Enhancing Closed-Loop Stability with a Lightweight Camera-Only Framework”, Submitted to 2026 IEEE Intelligent Vehicles Symposium (Under Review).	
	First author. “Rule-Conformant End-to-End Autonomous Driving: Safer Intersection Behavior via Enforced Cue Representation”, Submitted to 2026 IEEE Intelligent Vehicles Symposium (Under Review).	
PROJECTS	2025 Hyundai Motor Group Autonomous Driving Challenge	Oct. 2024 – Sep. 2025
	1st Round: 3rd place (₩5M Reward) 2nd Round: 1st place (Team leader) (₩30M Reward, Recruitment perks, China Tech Tour)	
	<ul style="list-style-type: none">Developed a deployment-oriented End-to-End AD model, prioritizing closed-loop performance.Utilized DAGger to enhance model robustness in Out-of-Distribution scenarios, resolving the covariate shift issue in imitation learning.Achieved 16Hz inference speed on NVIDIA Jetson AGX Orin.	
	BEV-based Lane Detection for ERP42	Dec. 2023 – Feb. 2024
	<ul style="list-style-type: none">Developed and validated a lane detection framework using conventional computer vision techniques for ERP42 in UNIST.	

Multi-Teacher Knowledge Distillation based Pedestrian Detection

Aug. 2023 – Dec. 2023

- Collected and labeled a custom dataset using pseudo-labeling techniques to maximize data efficiency and minimize labeling cost.
- Developed a real-time pedestrian detection model using MTKD, improving detection accuracy (over 16% mAP gain) compared to the fine-tuned model.

Truck-Discharging Waste Segmentation using Event Camera Data

Jan. 2023 – Jun. 2023

- Developed an event-based motion segmentation algorithm for the precise detection of anomalous waste in incineration plant environments.
- Implemented Event-RGB stereo matching techniques for robust 3D perception.

Event-based Vehicle Tracking in Highway Surveillance System

Jun. 2022 – Aug. 2022

- Developed a low-cost vehicle tracking algorithm (clustering and event-seeking based) for highway surveillance systems using an event camera for high efficiency.

DuckieTown Project

Feb. 2022 – May. 2022

- Developed lane and object detection framework (Fine-tuning on custom dataset).

AWARDS

Excellence Award | AI Tech Open Workshop (AI Graduate School)

Apr. 2025 – Sep. 2025

- Project Title: Development of an End-to-End Autonomous Driving Framework Using a High-Fidelity Simulator.
- ₩ 2,500,000 Reward

ACADEMIC
EXPERIENCE

Reviewer | 2026 IEEE Intelligent Vehicles Symposium (IV)

Nov. 2025

WORK &
TEACHING
EXPERIENCES

Ulsan National Institute of Science and Technology

Teaching Assistant

Spring 2024, Spring 2025

- AI Programming I

Research Intern

Jun. 2022 – Aug. 2022

- Robotics and Mobility Lab.

WasteAnd GmbH

Working Student

Oct. 2022 – Jun. 2023

Jacobs University Bremen (Currently Constructor University)

Teaching Assistant

2021 – 2023

- Algorithms and Data Structures (C++)
- Programming in C/C++
- Embedded Systems
- Introduction to Robotics and Intelligent Systems Lab (Arduino)

SKILLS

Languages

- Korean ●●●●●
- English ●●●●●
- German ●●●○○

Frameworks & Libraries

PyTorch, OpenCV, Pandas, NumPy

Programming Languages

Python, C++, Matlab

Tools & Platform

ROS, Git, Docker, MORAI simulator