HOJUN CHOI

6th floor, 108, Taebong-ro, Seocho-gu, Seoul, Republic of Korea

+82 10-7185-1250 ◇ hchoi256@kaist.ac.kr ◇ Personal Website ◇ Google Scholar

RESEARCH INTEREST

I am a first-year PhD student in Artificial Intelligence at KAIST AI, advised by Prof. Kate Shim. I was very fortunate to work with Prof. Ran in 2022 as an undergraduate research intern on autonomous driving at the CAVH Research Group. I started my research internships in 2023 with Prof. U Kang in the language model group of the data mining lab at Seoul National University, in 2023–2024 with Prof. Insik Shin in the agentic AI group at FLUIZ, and in 2025 with Dr. Jinhan Lee in the autonomous driving group at NAVER LABS.

My research interests include:

- Multimodal large language models (MLLMs).
- End-to-end autonomous driving systems.
- Agentic AI, autonomous AI systems.

EDUCATION

Kim Jaechul Graduate School of Artificial Intelligence, KAIST Jan. 2026 – Present
PhD in Artificial Intelligence

Kim Jaechul Graduate School of Artificial Intelligence, KAIST Jan. 2024 – Dec. 2025
Master of Science (MS) in Artificial Intelligence GPA: 3.85/4.0

University of Wisconsin-Madison Jan. 2017 – Dec. 2022
Bachelor of Science (BS) in Computer Science and Data Science GPA: 3.9/4.0

RESEARCH PUBLICATION

1. **Hojun Choi**, Seulbin Hwang, Dae Jung Kim, Kisung Kim, Hyunjung Shim, and Jinhan Lee "*OVBEVSeg: Open-Vocabulary BEV Segmentation with BEV-Aware 3D Gaussian Splatting*" Under Submission.

2. Wonjeong Ryu, Seungjun Yu, Seokha Moon, **Hojun Choi**, Junsung Park, Jinkyu Kim, and Hyunjung Shim "*SUPER-AD: Semantic Uncertainty-aware Planning for End-to-End Robust Autonomous Driving*" ArXiv. 2025.

3. **Hojun Choi**, Youngsun Lim, Jaeyo Shin, and Hyunjung Shim "*CoT-PL: Visual Chain-of-Thought Reasoning Meets Pseudo-Labeling for Open-Vocabulary Object Detection*" Arxiv. 2025

4. Youngsun Lim*, **Hojun Choi***, and Hyunjung Shim "*Evaluating Image Hallucination in Text-to-Image Generation with Question-Answering*" Published on AAAI. 2025. (**Oral Presentation**) *: Equal contributions.

5. **Hojun Choi**, Junsuk Choe, and Hyunjung Shim "*Sampling Bag of Views for Open-Vocabulary Object Detection*" Arxiv. 2024

6. Sunjae Lee, Junyoung Choi, Jungjae Lee, Munim Hasan Wasi, **Hojun Choi**, Steven Y. Ko, Sangeun Oh, and Insik Shin "*MobileGPT: Augmenting LLM with Human-like App Memory for Mobile Task Automation*" Published on ACM MobiCom. 2024

7. Seungcheol Park, **Hojun Choi**, and U Kang "*Accurate Retraining-free Pruning for Pre-trained Encoder-based Language Models*" Published on ICLR. 2024

PROFESSIONAL SERVICES

- **Reviewer**: AAAI, ICLR, CVPR 2026
- **Reviewer**: NeurIPS, TPAMI 2025
- **Reviewer**: CVPR 2024

- **Research Assistant**: KT–AI Convergence Education Program.   2023
- **Teaching Assistant**: Introduction to Human Computer Interactions (CS570).   Fall 2022
- **Teaching Assistant**: Introduction to Artificial Intelligence (CS540).   Fall 2022
- **Teaching Assistant**: Elementary Matrix and Linear Algebra (CS340).   Spring 2022
- **Teaching Assistant**: Introduction to Computer Systems (CS354).   Spring 2022
- **Teaching Assistant**: Programming III (CS400).   Spring 2022
- **Teaching Assistant**: Elementary Matrix and Linear Algebra (CS340).   Fall 2021
- **Teaching Assistant**: Introduction to Computer Engineering (CS252).   Fall 2021

ACADEMIC EXPERIENCE

Research Intern   May. 2025 – Nov. 2025
NAVER LABS Corp.   *Seongnam, South Korea*

- Work with Dr. Jinhan Lee at NAVER LABS on end-to-end autonomous driving planning.
- Collaborate with Dr. Jinhan Lee and researchers at NAVER LABS to extend VLMs for open-world autonomous-driving perception and 3DGS for real-time efficiency.
- Carry out all tasks, including coding and experiments, independently in these projects.
- First-author paper under review at a top-tier computer vision conference.

Research Intern   Sep. 2023 – Feb. 2024
FLUIZ   *Seoul, South Korea*

- Work as a research intern advised by Prof. Insik Shin in the agentic AI group of the CPS Lab at KAIST.
- Contribute to improving LLM agents for mobile task automation by integrating app-structured memory via a human-like, memory-augmented agent framework.
- Publish a co-authored paper at **ACM MobiCom 2024**.

Research Intern   Jan. 2023 – Jul. 2023
Seoul National University   *Seoul, South Korea*

- Work with Prof. U Kang and researchers in the model compression group of the data mining Lab at SNU.
- Collaborate on model compression via an offline, training-free pruning method.
- Publish a co-authored paper at **ICLR 2024**.

Undergraduate Research Internship   Sep. 2022 – Dec. 2022
CAVH Research Group   *Wisconsin, USA*

- Collaborate with team members on an end-to-end driving perception project based on a DETR-style architecture.
- Implement a custom CARLA environment modeling a university campus for delivery robots to evaluate our model.

SKILLS

- **Languages**: Korean, English
- **Programming**: Python, C/C++/Csharp, LaTeX, MATLAB, Mathematica, JavaScript
- **Machine Learning**: PyTorch, TensorFlow, scikit-learn
- **Tools**: SQL, Shell, Git, Slurm
- **Other**: SPSS, Linux (openSUSE, Ubuntu), Mac OS, Windows OS

AWARDS

- **Oral Presentation**, Image Processing and Image Understanding (IPIU), 2025
- **Top 10%**, Autonomous Sensor Antenna Prediction Competition, LG Research AI, 2022
- **Honorable Mention**, UPL Hatathon, 2022
- **Dean's List Recipient**, University of Wisconsin-Madison, Every Semester Attended

MISCELLANEOUS

- I love playing soccer and basketball, and I also love hiking in my spare time.
- I also enjoy online RPGs, as they spark my imagination and motivate me to create.