

♥ RESEARCH INTERESTS

- **Multimodal Learning**: agentic framework and post-training/RL, with a particular focus on **video**.
- **Embodied Agents**: adaptive action modeling in robotics with **perceptual modality** (e.g., 3D LiRAR, Gaze, HD Maps).

🎓 EDUCATION

<b>The University of North Carolina at Chapel Hill</b> <i>Ph.D. Computer Science (Advisor: Mohit Bansal)</i>	NC, United States Aug. 2024 —
<b>Korea University</b> <i>B.E. Department of Statistics</i>	Seoul, South Korea Mar. 2019 — Feb. 2024

🏢 RESEARCH EXPERIENCES

<b>Meta Superintelligence Labs</b> <i>Research Intern</i>	CA, United States May.2026 —
<b>Adobe Research</b> <i>Research Intern (Mentor: Subhojyoti Mukherjee, Branislav Kveton)</i>	CA, United States May.2025 — Nov.2025
<b>UNC Chapel Hill</b> <i>Research Assistant (Advisor: Mohit Bansal)</i>	NC, United States Aug.2024 — Current
<b>KAIST</b> <i>Research Intern / Contract Researcher (Advisor: Sung Ju Hwang)</i>	Seoul, South Korea Mar.2023 — Aug.2024
<b>NAVER LABS</b> <i>Research Intern (Mentor: Minheok Heo)</i>	Jungja, South Korea Jul.2022 — Dec.2022
<b>Korea University</b> <i>Research Intern (Advisor: Jinkyu Kim)</i>	Seoul, South Korea Jul.2021 — Dec.2022

📄 PUBLICATIONS

[P2] **IndustryNav: Exploring Spatial Reasoning of Embodied Agents in Dynamic Industrial Navigation**  
Yifan Li, Lichi Li, Anh Dao, Xinyu Zhou, Yicheng Qiao, Zheda Mai, [Daeun Lee](#), Zichen Chen, Zhen Tan, Mohit Bansal, Yu Kong.  
*Under review*

[P1] **VideoRepair: Self-Correcting Text-to-Video Generation with Misalignment Detection and Localized Refinement**  
[Daeun Lee](#), Jaehong Yoon, Jaemin Cho, Mohit Bansal.  
*Under review*

[C6] **StreamGaze: Gaze-Guided Temporal Reasoning and Proactive Understanding in Streaming Videos**  
[Daeun Lee](#), Subhojyoti Mukherjee, Brano Kveton, Ryan Rossi, Viet Lai, David Seunghyun Yoon, Franck Dernoncourt, Trung Bui, Mohit Bansal.  
*The IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2026.*

[C5] **Video-Skill-CoT: Skill-based Chain-of-Thoughts for Domain-Adaptive Video Reasoning**  
[Daeun Lee](#)<sup>\*</sup>, Jaehong Yoon<sup>\*</sup>, Jaemin Cho, Mohit Bansal.  
*Empirical Methods in Natural Language Processing (EMNLP) Findings, 2025.*

[C4] **BECotTA: Input-dependent Online Blending of Experts for Continual Test-Time Adaptation**  
[Daeun Lee](#)<sup>\*</sup>, Jaehong Yoon<sup>\*</sup>, Sung Ju Hwang.  
*International Conference on Machine Learning (ICML), 2024*

### [C3] HD Maps are Lane Detection Generalizers: A Novel Generative Framework for Single-Source Domain Generalization

[Daeun Lee](#), Minhyeok Heo, Jiwon Kim.

CVPR Data-Driven Autonomous Driving Simulation Workshop ([CVPRW](#)), 2024

### [C2] Resolving Class Imbalance for LiDAR-based Object Detector by Dynamic Weight Average and Contextual Ground Truth Sampling

[Daeun Lee](#), Jinkyu Kim.

IEEE/CVF Winter Conference on Applications of Computer Vision ([WACV](#)), 2023

### [C1] Bridging the Domain Gap towards Generalization in Automatic Colorization

Hyejin Lee, Daehee Kim, [Daeun Lee](#), Jinkyu Kim and Jaekoo Lee.

European Conference on Computer Vision ([ECCV](#)), 2022

### [P1] Trajectory Prediction by Clustering Human Interactions at Multiple Scales

Chiho Choi\*, [Daeun Lee\\*](#), Srikanth Malla, Sangjae Bae, Jinkyu Kim.

Preprint

## ACADEMIC SERVICES

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### Reviewer

CVPR 2022-2026, ECCV/ICCV 2022-2025, AAAI 2025, NeurIPS 2025

### Invited Talks

Sep 2025. **SKKU (Sungkyunkwan University)** Google Developer Groups .

Jan 2025. **Cisco**. 'Reliable Text-to-Video Generation'

## AWARDS/HONORS

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Travel Grant from ICML 2024 Area Chair

Jun.2024

Digital Innovation Big Data Contest

May.2021

[2nd place](#), Korea Enterprise Data Corp.(KED)

ICT Autonomous Driving Project

Dec.2020

[5st place](#), The Federation of Korean Information Industries

Financial Big Data Festival

Dec.2020

[1st place](#), MiraeAsset.Corp

Kakao Arena Competition

May.2020

[Top 2%](#), Kakao.Corp

Outstanding Student Scholarship

2021-2023

Korea University

## SKILLS

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**Programming Ability:** Python, C, Matlab, Git, PyTorch, Tensorflow, Linux, LaTeX, R, SAS

**Language Ability:** Fluent in both Korean and English, Beginner in Chinese

## REFERENCES

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**Mohit Bansal** Professor at UNC Chapel Hill    [mbansal@cs.unc.edu](mailto:mbansal@cs.unc.edu)

**Jinkyu Kim** Professor at Korea University    [jinkyukim@korea.ac.kr](mailto:jinkyukim@korea.ac.kr)

**Sung Ju Hwang** Professor at KAIST    [sjhwang82@kaist.ac.kr](mailto:sjhwang82@kaist.ac.kr)

**Yousung Park** Emeritus professor at Korea University    [yspark433@gmail.com](mailto:yspark433@gmail.com)