JANGHYUN KIM

CONTACT INFORMATION

Ph.D. Student
Department of Information Convergence Engineering
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Republic of Korea (South Korea)

RESEARCH INTERESTS

Computer Vision, Multi-Modal Sensor Systems, Depth Completion / Depth Estimation, Video Understanding

EDUCATION

Pusan National University, Republic of Korea   *Sep. 2024 — Present*
Ph.D. Student, Department of Information Convergence Engineering
- Laboratory: Visual Intelligence and Perception Lab
- Advisor: Prof. Jinsun Park

Pusan National University, Republic of Korea   *Sep. 2022 — Aug. 2024*
M.S., Department of Information Convergence Engineering
- Thesis: "Non-Local Affinity Distillation Network for Lightweight Depth Completion"
- Advisor: Prof. Jinsun Park

Pukyong National University, Republic of Korea   *Mar. 2016 — Aug. 2022*
B.S., Statistics and Data Science

RESEARCH EXPERIENCE

INRIA, France   *June. 2025 — Sep. 2025*
Research Intern
- Advisor: Prof. Francois Bremond
- Multi-modal emotion recognition with EEG and video

Pusan National University, Korea   *Nov. 2023 — Sep. 2024*
Researcher, M&D
- Advisor: Prof. Jinsun Park
- Development of a depth estimation model based on stereo RGB images

Pusan National University, Korea   *Mar. 2023 — Aug. 2023*
Researcher, Samsung Heavy Industries Co., Ltd.
- Advisor: Prof. Jinsun Park
- Core algorithms for object detection in videos

Pusan National University, Korea   *Jul. 2022 — Dec. 2023*
Research Intern & Researcher, LG Electronics Inc.
- Advisor: Prof. Jinsun Park
- Deep learning based depth perception
- Lightweight neural network for stereo depth estimation

PUBLICATIONS

International Conference

- Yonghyeon Jo, **Janghyun Kim**, and Jinsun Park, "BAC-GCN: Background-Aware CLIP-GCN Framework for Unsupervised Multi-Label Classification", *ACM International Conference on Multimedia* (**ACM MM**), Oct 2025.

- **Janghyun Kim**, Ukcheol Shin, Seokyong Heo, and Jinsun Park, "Exploiting Cross-modal Cost Volume for Multi-sensor Depth Estimation", *Asian Conference on Computer Vision* (**ACCV**), Dec 2024.

International Journal

- Chanil Park, **Janghyun Kim**, Minseong Kweon, and Jinsun Park, "CAR-Stereo: Confidence-aware Adaptive Disparity Refinement for Real-time Stereo Matching", *IEEE Robotics and Automation Letters* (**RAL**), Jan 2026.

- **Janghyun Kim**, Jeonghyun Noh, Mingyu Jeong, Wonju Lee, Yeonchool Park, and Jinsun Park, "ADNet: Non-Local Affinity Distillation Network for Lightweight Depth Completion with Guidance from Missing LiDAR Points", *IEEE Robotics and Automation Letters* (**RAL**), Jul 2024.

Under Review

- Minseong Kweon[†], **Janghyun Kim**[†], Ukcheol Shin, and Jinsun Park, "MrGS: Multi-modal Radiance Fields with 3D Gaussian Splatting for RGB-Thermal Novel View Synthesis", *arXiv*, 2025. [†] Equal contribution.

- **Janghyun Kim**, Minseong Kweon, Jinsun Park, and Ukcheol Shin, "All-day Depth Completion via Thermal-LiDAR Fusion", *arXiv*, 2025.

- "A Unified Framework for EEG–Video Emotion Recognition with Brain Anatomy Guidance"

AWARDS & SCHOLARSHIPS

- Best Poster Award *May. 2025*
  Issued by ICRA TIRO Workshop

- Fellowship for Grad Student *May. 2024*
  Issued by Pusan National University

- Best Student Paper Award *Jan. 2024*
  Issued by KJCCS

SKILLS

Programming Languages	Python, LaTeX, R, SAS
Deep Learning Frameworks	Proficient in **Pytorch**, with working knowledge of TensorFlow

LANGUAGES

Korean, English

REFERENCE

- **Prof. Jinsun Park**
  Associate Professor, School of Computer Science and Engineering, Pusan National University (**PNU**)
  Email: jspark@pusan.ac.kr
  Web: https://pnu-viplab.github.io

- **Prof. Francois Bremond**
  Research Director, STARS Team, **INRIA**
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