BYUNGWOO JEON

imbw2024@kaist.ac.kr \leftharpootyjeon.github.io \leftharpootyjeon

RESEARCH INTEREST

The northstar of my research is finding a unified and scalable framework aligned with multi-modalities and human preferences for various vision tasks. To this end, I'm delving into 3D/4D reconstruction problems and focusing on building effective representations of the 3D world to be used in real-time for real-world problems.

• High-dimensional vision

- Implicit Neural Representations
- Gaussian Splatting

• Generative models

- Diffusion models
- Video Generation

WORK EXPERIENCE

ALINLAB, Research Intern (advisor: Prof. Jinwoo Shin)	Jeongja, South Korea / Mar 2023 - Aug 2024
Arcreal, ML Engineer (host: Prof. Jinwoo Shin)	Gangnam, South Korea / Jan 2023 - Jan 2024
MLVLAB, Research Intern (advisor: Prof. Hyunwoo J. Kim)	Anam, South Korea / Jul 2022 - Dec 2022
M-monstar, Fullstack Engineer	Pangyo, South Korea / Jul 2021 - Aug 2021

EDUCATION

KAIST, M.S./Ph.D. student in Artificial Intelligence (advisor: Prof. Jinwoo Shin)	Sep 2024 - Current
Korea University, B.S. in Computer Science and Engineering, Statistics (second major)	Mar 2020 - Aug 2024

PUBLICATIONS

C: conference, J: journal, W: workshop, P: preprint / * equal contribution

[C1] TrackIME: Enhanced Video Point Tracking via Instance Motion Estimation Seong Hyeon Park, Huiwon Jang, <u>Byungwoo Jeon</u>, Sukmin Yun, Paul Hongsuck Seo, and Jinwoo Shin Conference on Neural Information Processing Systems (NeurIPS), 2024, <u>Spotlight Presentation</u>

MENTORING

Byungjun Yoon (B.S. @ POSTECH). Co-advised a project, working in progress.

HONORS & AWARDS

Silver Prize, K-Data Science Hackathon, 2023 (\$2,000) Top 8, Artificial Intelligence Grand Challenge, 2022 Dean's List, Korea University, 2020 - 2023

SELECTED TALKS

Korea University, Google DSC, "Recent Advances in Machine Learning," Nov 2023

PROJECTS

Google DSC, "Google Solution Challenge: Recovery," 2024

Google DSC, "Horang Studio: personalized AI profile service," 2023

Google DSC, "Google Solution Challenge: digiHow," 2023