# BYUNGWOO JEON

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## 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, Byungwoo Jeon, Sukmin Yun, Paul Hongsuck Seo, and Jinwoo Shin
Conference on Neural Information Processing Systems (NeurIPS), 2024, Spotlight

## 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