

Sungjae Park

(+1) 412-606-2379 | sungjae2@andrew.cmu.edu | rureadyo.github.io

Education

Carnegie Mellon University

M.S. in Robotics

Advisor: Shubham Tulsiani

Sep. 2024 – Present

Seoul National University

B.S. in Mechanical Engineering (Double Major in Mathematics)

GPA: 4.23/4.3

Graduated 1st in Mechanical Engineering, 2nd in College of Engineering (among fall graduates)

Leave of absence for military service: Apr. 2019 – Feb. 2021

Mar. 2017 – Aug. 2023

Publications

1. **Sungjae Park**, Homanga Bharadhwaj, Shubham Tulsiani. *DemoDiffusion: One-Shot Human Imitation using Pre-trained Diffusion Policy*. Preprint, 2025.
2. Yanbo Xu*, Yu Wu*, **Sungjae Park**, Zhizhou Zhou, Shubham Tulsiani. *Temporal Score Rescaling for Temperature Sampling in Diffusion and Flow Models*. Preprint, 2025.
3. **Sungjae Park***, Seungho Lee*, Mingi Choi*, Jiye Lee, Jeonghwan Kim, Jisoo Kim, Hanbyul Joo. *Learning to Transfer Human Hand Skills for Robot Manipulations*. CoRL 2024, X-Embodiment Workshop.
4. DROID Dataset Team, *DROID: A Large-Scale In-the-Wild Robot Manipulation Dataset*. RSS 2024.
5. Open X-Embodiment Collaboration, *Open X-Embodiment: Robotic Learning Datasets and RT-X Models*. ICRA 2024.

Research Experience

Physical Perception Lab, Carnegie Mellon University

Sep. 2024 – Present

Research Assistant (Advisor: Shubham Tulsiani)

- Developed a manipulation framework for one-shot imitation of human data with pre-trained policy.
- Developed an algorithm for steering sampling distributions in diffusion and flow matching models.

Visual Computing Lab, Seoul National University

Feb. 2024 – Aug. 2024

Research Intern (Advisor: Hanbyul Joo)

- Developed a framework for learning dexterous manipulation from human motion capture data.

Scholarships

- **Kwanjeong Overseas Fellowship** (2-year support for M.S. studies, Present)
- Presidential Science Scholarship (Mar. 2021 – Dec. 2022)
- Gangwon-do Future Talent Science Scholarship (Jan. 2018 – Dec. 2022)
- Full academic excellence scholarship (Mar. 2018 – Feb. 2019, Mar. 2021)

Awards

- Outstanding B.S. Thesis Presentation Award, Dec. 2022
- 2nd Place, International Design Contest Robocon, Aug. 2018

Services

Reviewer: NeurIPS, ICLR, CoRL, ICRA, RA-L

Teaching Experience

- Teaching Assistant — Introduction to Robotics (Spring 2022)
- Undergraduate Tutor — Linear Algebra I (Spring 2021)
- Undergraduate Tutor — Physics 1,2 (Spring 2018, Fall 2018, Spring 2021, Fall 2021)

Skills

Languages: C++, Python, Java, HTML

Libraries/Frameworks: PyTorch, ROS, ROS2, YOLO, SMACH

Modeling: SolidWorks