https://github.com/jslee525
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http://jslee525.github.io

Junsung Lee Undergraduate student

Education

Department of Electrical & Computer Engineering, SNU Seoul, Korea
Undergraduate student in Seoul National University(SNU) 2020 - 2026 *(expected)*
- Advisor: Prof. Bohyung Han
- GPA: 4.24/4.30 (equivalent to 3.98 / 4.00)

Sejong Academy of Science and Arts Sejong, Korea
Graduated with Highest Honor (Math & Science) 2017 - 2020

Research Interests

Approaches
Training-Free Image/Video Editing and Generation, Diffusion Models, Generative Modeling

Goals
Developing Vision-related technologies that can be applied to daily life, enable people to freely manipulate and manage visual data within a positive and ethical scope.

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Publications

1. **Junsung Lee**, Minsoo Kang, Bohyung Han. Diffusion-Based Image-to-Image Translation by Noise Correction via Prompt Interpolation. *European Conference on Computer Vision (ECCV)*, 2024.
2. **Junsung Lee**, Junoh Kang, Bohyung Han. STR-Match: Matching SpatioTemporal Relevance Score for Training-Free Video Editing. *Under Review*, 2025.
3. **Junsung Lee**, Thao Nguyen, Yong Jae Lee, Bohyung Han. [TBA] *Working in Progress*, 2025.

Work Experiences

UW-Madison | Research Collaborator (Prof. Yong Jae Lee) 2025.06 - 2025.12 *(expected)*
- Research on personalized text-to-video generation

SNU CV Lab | Undergraduate Intern (Prof. Bohyung Han) 2023.02 - 2025.12 *(expected)*
- Research on Generative Models, especially Image & Video Translation
- Focusing on Training-Free Image/Video Editing Method

CTO / Lead AI Developer (FormsKorea) | Seoul, Korea 2023.12 - 2024.04
- Leading the project of "Pop-Up Store AI Photo Card" with HYUNDAI
- Developing pipelines for Diffusion Models, Fine-Tuning using various methods, User Study

Teaching Experiences

Assistant TA | 2025 Class of 'Signal and System', 'Introduction to Random Variables and Random Processes' 2025. 03 - 2025. 06
- Assisted students in understanding the foundational concepts covered in the course

General TA | 2024 SNU FastMRI Challenge 2024.05 - 2024.09
- MRI reconstruction with data from different acceleration modes
- Baseline Implementation, Dataset Preparation, Supervision, Evaluation

Assistant TA | 2023 Class of 'Introduction to Big Data' 2023.03 - 2023.07
- Guided students on their projects and provided mentorship in deep learning concepts

Awards and Honors

Academic Scholarship | Woonhae Fondation Scholarship 2025.01.
- Recognized for excellence in artificial intelligence skills, Awarded $2,800 for each semester

First Prize | 2023 SNU FastMRI Challenge 2023.09.
- Won 1st place (out of 144 teams), MRI Reconstruction using deep learning

Fourth Prize | 2022 Military AI Competition (MAICON) 2022.09.
- Won 1st place in the preliminary round (out of 1,100 participants, Team Leader), Won 4th prize in the final round (out of 10 teams, Team Leader)
- Solving problems of change detection & object tracking for developing technologies in military

First Prize | 2021 Class of 'Introduction to Circuit Theory and Laboratory' 2021.06.
- Won 1st place (out of 40 teams), Implementing Optimized Circuit of Guitar Tuner

Academic Scholarship | Semiconductor Track Scholarship 2024.02.
- Recognized for excellence in interdisciplinary studies; awarded $4,300 to date, with $10,000 to be awarded upon graduation

Academic Scholarship | Presidental Science Scholarship 2020.02.
- Recognized by the President as one of the top 120 STEM students in Korea; awarded $44,000 covering full tuition and scholarship.

Extra Curricular

- **Vice President**, SNU Acoustic Band BAB 2023.07 - 2024.07
- **Student Representative**, Electrical & Computer Engineering 2020.02 - 2021.09
- **Student Mentor for freshmen**, Seoul National University 2024.12 - 2025.07 *(expected)*

Skills

Languages: Korean, English (TOEFL $\geq$ 100)

Programming: `Python`, `C++`, `MATLAB`, `Verilog`, `Node.js`