Kyeongha Rho

Daejeon, South Korea khrho325@kaist.ac.kr +82-10-3472-2379

LinkedIn Github Google Scholar

Research Interests

My research interest lies in learning semantically rich representations from multiple modalities and harnessing them to solve diverse multimodal tasks across perception and generation.

Education

Korea Advanced Institute of Science and Technology (KAIST) *Sept 2024 – Present*
Ph.D. in Electrical Engineering Adviser: Joon Son Chung

Korea Advanced Institute of Science and Technology (KAIST) *Sept 2022 – Aug 2024*
MS in Electrical Engineering Adviser: Joon Son Chung

Korea Advanced Institute of Science and Technology (KAIST) *Mar 2015 – Feb 2019*
BS in Electrical Engineering

- GPA: 3.93/4.3 (*Magna Cum Laude*)

Work Experience

Research Intern *Pangyo, South Korea*
Naver Webtoon Corporation *Jul 2022 – Aug 2022*

- Assisted with a research project on generating talking faces for webtoon characters.

Research Officer (First Lieutenant) *Daejeon, South Korea*
Agency for Defense Development (ADD) *Jun 2019 – May 2022*

- Led research on RGB image-based LiDAR depth image completion.
- Contributed to developing contrastive learning method for reinforcement learning.
- Supported a project on removing noise from satellite images for enhancing the quality of object detection.

Research Assistant *Daejeon, South Korea*
Data Intelligence Lab, KAIST *Mar 2018 – Dec 2018*

- Participated in a survey project on the interpretability and fairness of deep learning models.

Publications

C=Conference, J=Journal / * equal contribution

[**C.1**] **LAVCap: LLM-based Audio-Visual Captioning using Optimal Transport**
Kyeongha Rho*, Hyeongkeun Lee*, Valentio Iverson, and Joon Son Chung
International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2025

[**C.2**] **EquiAV: Leveraging Equivariance for Audio-Visual Contrastive Learning**
Jongsuk Kim*, Hyeongkeun Lee*, **Kyeongha Rho***, Junmo Kim, and Joon Son Chung
International Conference on Machine Learning (ICML), 2024

[**C.3**] **Talknce: Improving active speaker detection with talk-aware contrastive learning**
Chaeyoung Jung, Suyeon Lee, Kihyun Nam, **Kyeongha Rho**, You-Jin Kim, Youngjoon Jang, and Joon Son Chung.
International Conference on Acoustics, Speech, and Signal Processing (ICASSP), 2024

[**C.4**] **That's What I Said: Fully-Controllable Talking Face Generation**
Youngjoon Jang*, **Kyeongha Rho***, Jongbin Woo, Hyeongkeun Lee, Jihwan Park, Youshin Lim, Byeong-Yeol Kim, and Joon Son Chung
ACM International Conference on Multimedia (ACMMM), 2023

[**C.5**] **Guideformer: Transformers for image guided depth completion**
Kyeongha Rho*, Jinsung Ha*, Youngjung Kim
Conference on Computer Vision and Pattern Recognition (CVPR), 2022

[**J.1**] **Action-driven contrastive representation for reinforcement learning**
Minbeom Kim, **Kyeongha Rho**, Yong-duk Kim, Kyomin Jung
PLoS ONE (IF: 3.2), 2022.

Honors and Awards

Presidential Science Scholarship *2025 - Present*

Outstanding Teaching Assistant Award *2024*

- *Deep Learning for Computer Vision (EE488), KAIST (Fall 2023)*

Kwon Young-Se Scholarship *2022*

4th Place, **NTIRE 2020 Workshop Challenge (in conjunction with CVPR 2020)** *2020*

- *Spectral Reconstruction from an RGB Image Track*

4th Place, **NTIRE 2020 Workshop Challenge (in conjuction with CVPR 2020)** *2020*

- *Real Image Denoising Track*

Teaching

Teaching Assistant, Speech Recognition Systems (EE738), KAIST *Spring 2024*

Teaching Assistant (Head TA), Deep Learning for Computer Vision (EE488), KAIST *Fall 2023*

Teaching Assistant, Speech Recognition Systems(EE738), KAIST *Spring 2023*

Teaching Assistant, Deep Learning for Computer Vision (EE488), KAIST *Fall 2022*

Skills

Programming: Python, Pytorch, Tensorflow, C/C++

Language: Korean (Native), English (Advanced)