Soojin Hwang

+821054276415 | sarahsj000622@gmail.com | June 22nd, 2000 | | |

Personal Profile

I am currently pursuing a Master's degree in Artificial Intelligence at POSTECH under the supervision of Professor Won Hwa Kim. My research centers around computer vision tasks with textual information. Previously, I have specialized in Natural Language Processing, with a particular focus on Korean-language applications. Presently, I am exploring multi-modal learning based on Large Langauge Model with a focus on utilizing diverse real-world modalities beyond public datasets, including medical and semiconductor data.

Education

POSTECH *Pohang, Republic of Korea*
MSc. in Artificial Intelligence *Feb 2024 - Current*
- Cumulative GPA: 3.93/4.30

Inha University *Incheon, Republic of Korea*
BSc. in Compute Science and Engineering *Mar 2019 - Feb 2024*
- Cumulative GPA: 4.22/4.50

University of Hull *Hull, England*
Computer Science, Artificial Intelligence *Sep 2022 - Feb 2023*
- Project : Sentiment Analysis on Social Media Text (Score: 85/100)

Achievements

2025 **Outstanding Award**, 39th KSIIM Annual Conference *Seoul*
2023 **Best Project Award**, Capstone Design 2023 *Incheon*

Publications

Soojin Hwang*, Jaeyoon Sim*, Won Hwa Kim, "HiMix: Hierarchical Visual-Textual Mixing Network for Lesion Segmentation", IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2026 (* Equal contribution)

Soojin Hwang*, Jaeyoon Sim*, Won Hwa Kim, "REMix: Refinement-Enhanced Visual-Textual Mixing for Lesion Segmentation", International Workshop on Emerging LLM/LMM Applications in Medical Imaging (ELAMI), 2026 (* Equal contribution)

Yechan Hwang, **Soojin Hwang**, Guorong Wu, Won Hwa Kim, "Multi-order simplex-based graph neural network for brain network analysis", MICCAI 2024 (International Conference on Medical Image Computing and Computer-Assisted Intervention), 2024

Soojin Hwang, Donghyun Kim, Young-Duk Seo, "A BERT-Based Masked Language Model Using a Morphological Analyzer", Proceedings of KIIT Conference, 2023

Jaeyoon Sim*, **Soojin Hwang***, Guorong Wu, Won Hwa Kim, "Transformer-Guided Adaptive Diffusion for Multi-Modal Brain Network Analysis", Submitted to IEEE Transactions on Medical Imaging (Under Review) (* Equal contribution)

Projects

Graph Design System(GDS) Understanding Model *Pohang, Korea*
POSTECH, joint research with Samsung Electronics DS *May 2025 - Present*
- Developing a unified semiconductor layout understanding framework to address various GDS-based tasks.
- Designed domain-specific pretext tasks for pre-training and established evaluation benchmarks to validate geometric understanding.

Video Streaming & Personal Protective Equipment(PPE) Detection *Seoul, Korea*
Korea Institute of Science and Technology (KIST) *Dec 2021 - Feb 2022*
- Implemented AWS services for real-time video streaming and custom image recognition.
- Developed and deployed AI-powered applications in cloud-based ML pipelines and full-stack development.