

# Sunwoo Yu

School of Undergraduate Studies, College of Transdisciplinary studies  
Daegu Gyeongbuk Institute of Science and Technology (DGIST)

## RESEARCH INTEREST

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- Deep Learning
- Representation Learning
- Efficient Data Compression

## PERSONAL DATA

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Phone	+82-10-5762-2205		
E-mail	ysw0920@dgist.ac.kr		
Major	Computer Science		
GPA	3.98/4.3	Major GPA	4.18/4.3

## EDUCATION

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Daegu Gyeongbuk Institute of Science and Technology (DGIST) Mar.2020 — Present

School of Undergraduate Studies, College of Transdisciplinary studies  
Bachelor Student

University of California, Los Angeles (UCLA) Jun.2023 — Aug.2023

Exchange Program

## PUBLICATIONS

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\* Equal contributor

2. Daewon Kim, **Sunwoo Yu**, Jaehyeon Lee and Seonghun Lee, "Development of a Driver Monitoring System Using the Capacitive Steering Wheel and FMCW Radar", The Korean Institute of Communications and Information Sciences (KICS) Conference (Fall), Nov. **2024**. (Expected)
1. Jaehyeon Lee\*, **Sunwoo Yu**\*, Daewon Kim, and Kiwon Choi, "Multi-patching: life-log Classification with the Reconstructed Representation of Multivariate Time Series", The 15th International Conference on ICT Convergence (ICTC 2024), pp. 798-803, Oct. **2024**.

## RESEARCH EXPERIENCE

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• Undergraduate Group Research Program (UGRP) Feb.2024 — Dec.2024

at Department of Brain Sciences, DGIST

( Prof. Hankyoung Choe, DGIST ABC-DGIST)

✓ Design of a radar dataset collection system for subjects' sleep in polysomnography experiments

✓ predicting Heart/Respiratory Rate with radar data & predicting sleep stage using representation from HR/RR

- **Undergraduate Research Assistant**  
at Department of Electrical Engineering & Computer Science, DGIST  
( Prof. Hoonsung Chwa, DGIST RTCL)  
✓ **PyTorch Camp** : Learning how to use pytorch by implementing below paper  
(LaLaRAND: Flexible Layer-by-Layer CPU/GPU Scheduling for Real-Time DNN Tasks)  
✓ **Project** : Real-Time streaming system using foveated rendering  
✓ **Experience of editing PyTorch & OpenCV source code**

Sep.2023 — Nov.2024

AWARDS AND HONORS	
Encouragement Prize, The World Embedded Software Contest 2024, KESSIA	Nov.2024
Encouragement Prize, Human Understanding AI Paper Challenge 2024, ETRI	Oct.2024
- Director of ETRI(Electronics and Telecommunications Research Institute) Award	
Academic Excellence Award (DGIST)	Spring Semester, 2024
Academic Excellence Award (DGIST)	Fall Semester, 2023
Academic Excellence Award (DGIST)	Spring Semester, 2023

SKILLS	
TOEIC:	810/990
Language:	Python, C/C++
Tools:	Git, Docker, PyTorch, OpenAI Gym, ModusToolBox
	valid : Aug.2022 — Aug.2024