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Sunwoo Yu

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

RESEARCH INTEREST

- Deep Learning
- Representation Learning
- Efficient Data Compression

PERSONAL DATA

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

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

- * Equal contributor
- Daewon Kim, <u>Sunwoo Yu</u>, 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)
- Jaehyeon Lee^{*}, <u>Sunwoo Yu</u>^{*}, 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

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
- \checkmark predicting Heart Rate/Respiratory Rate with radar data & predicting sleep stage using representation from

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HR/RR

• Undergraduate Research Assistant

Sep.2023 — Nov.2024

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

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

valid : Aug.2022 — Aug.2024

Language:

Python, C/C++

Tools:

Git, Docker, PyTorch, OpenAl Gym, ModusToolBox