

Curriculum Vitae

A. Personal Identification

Name Wonseon Lim
Position Ph.D. student, School of Computer Science and Engineering
E-mail costor107@gmail.com
Homepage <http://air.cau.ac.kr/>
Tel and Fax +82-10-2070-9572
Address School of CSE, Chung-Ang Univ., 84 Heukseok-Ro, Dongjak-Gu, Seoul 06974, Korea
Interest On-Device AI, Continual Learning, Token Pruning, Neural Architecture Search

B. Education

2021 – 2027 Ph.D. Candidate in Dept. of Computer Science and Engineering, Chung-Ang Univ.
Academic Adviser: Prof. Dae-Won Kim
2024 Visiting student in Dept. of Mechanical and Industrial Engineering, Univ. of Toronto
Academic Adviser: Prof. Chi-Guhn Lee
2019 – 2021 M.Sc. in Dept. of Computer Science and Engineering, Chung-Ang Univ.
Academic Adviser: Prof. Dae-Won Kim
2013 – 2019 B.S. in Dept. of Applied Statistics, Chung-Ang Univ.

C. International Publications

C.1. Published from International Conferences

Wonseon Lim, Jaesung Lee and Dae-Won Kim
Critical Patch-Aware Sparse Prompting with Decoupled Training for Continual Learning on the Edge
The IEEE/CVF Computer Vision and Pattern Recognition Conference (CVPR) 2026
Acknowledgement: NRF-2023R1A2C1006745 (Prof. D.-W. Kim), IITP- 2021-0-01341 (Prof. J. Lee)

Haejung Lim*, **Wonseon Lim*** and Dae-Won Kim
MAND: Modality-Aware Novelty Detection for Open-World Egocentric Activity Recognition
ICML 2026 Workshop on Epistemic Intelligence in Machine Learning
Acknowledgement: NRF-2023R1A2C1006745 (Prof. D.-W. Kim)

C.2. Published from SCI(E) Journals

Wonseon Lim, Yu Zhou, Dae-Won Kim and Jaesung Lee
MixER: Mixup-based Experience Replay for Online Class-Incremental Learning
IEEE Access, March **2024**
<https://ieeexplore.ieee.org/document/10474005>
Acknowledgement: IITP- 2021-0-01341 (Prof. J. Lee), NRF-2023R1A2C1006745 (Prof. D.-W. Kim), JCYJ20220810112354002 (Prof. Y. Zhou)

Wonseon Lim, Wangduk Seo, Dae-Won Kim and Jaesung Lee
Efficient Human Activity Recognition using Lookup Table-based Neural Architecture Search for Mobile Devices
IEEE Access, July **2023**
<https://ieeexplore.ieee.org/document/10179914>
Acknowledgement: CAU-GRS (Prof. D.-W. Kim), NRF-2023R1A2C1006745 (Prof. D.-W. Kim)

Jaegyun Park, **Wonseon Lim**, Dae-Won Kim and Jaesung Lee
GTSNet: Flexible architecture under budget constraint for real-time human activity recognition from wearable sensor
Engineering Applications of Artificial Intelligence, 124, 106543. Sep **2023**
<https://doi.org/10.1016/j.engappai.2023.106543>
Acknowledgement: IITP-2021-0-01341 (Prof. J. Lee), NRF-2023R1A2C1006745 (Prof. D.-W. Kim)

Wangduk Seo, Jaegyun Park, **Wonseon Lim**, Dae-Won Kim and Jaesung Lee
Achieving an optimal group structure in a neural architecture search
Electronics Letters, 28 July **2022**

Publisher: The Institution of Engineering and Technology, ISSN: 0013-5194,
<https://ietresearch.onlinelibrary.wiley.com/doi/10.1049/ell2.12585>
 Acknowledgement: NRF-2020R1A2C101357511 (Prof. D.-W. Kim)

Jaesung Lee, Wangduk Seo, Jaegyun Park, **Wonseon Lim**, Ja Young Oh, Nam Ju Moon, Jeong Kyu Lee
 Neural Network-based Method for Diagnosing Graves' Orbitopathy using Orbital Computed Tomography
Scientific Reports, 12(12071):1-11, 15 July **2022**
 Publisher: Nature Portfolio, ISSN: 2045-2322, <https://www.nature.com/articles/s41598-022-16217-z>
 Acknowledgment: NRF-2017R1D1A1A09082089 (Prof. J.K. Lee)

Jaegyun Park, **Wonseon Lim**, Dae-Won Kim and Jaesung Lee
 Multi-Temporal Sampling Module for Real-Time Human Activity Recognition
IEEE Access, 10(1):54507-54515, 20 May **2022**
 Publisher: IEEE Inc., ISSN: 2169-3536, <https://doi.org/10.1109/ACCESS.2022.3176606>
 Acknowledgment: NRF-2020R1A2C101357511 (Prof. D.-W. Kim)

D. Domestic Publications

D.1. Published from KCI Journals

D.2. Published from Domestic Conferences

E. Projects

2024	Emotion-specialized Text-to-Video Retrieval, Univ. of Toronto MIE Course Work, 감정 특화 텍스트-비디오 검색, 토론토 대학교 산업공학과 수업과정
2024	Comparing SMILES versus SELFIES in Optimized Molecular Generation, Toronto LG AI Lab SMILES 와 SELFIES 를 활용한 최적화된 분자 생성 비교, 토론토 LG AI 연구실
2023 - present	Sustainable Learning Machines for On-Device Holistic Intelligence, NRF On-Device Holistic Intelligence 를 위한 Sustainable Learning Machines 기술 개발, 한국연구재단
2022 - 2023	Development of Integrated Development Framework that supports Automatic Neural Network Generation and Deployment optimized for Runtime Environment, IITP 신경망 응용 자동생성 및 실행환경 최적화 배포를 지원하는 통합 개발 프레임워크 기술개발, 정보통신기획평가원
2020 - 2023	Deep Learning Self-assembly Framework for On-Device AI, NRF On-Device AI 를 위한 자가 조립형 딥러닝 프레임워크 기술 개발, 한국연구재단
2020 - 2021	Clinical Application of Deep Learning based Image Analysis for Gallbladder Polyp and Gallbladder Wall Thickening, SNUH 담낭 용종 및 담낭벽 비후에 대한 심층 학습 기반 이미지 분석 및 임상 적용, 서울대학교병원
2019 - 2021	Development of Computer based Three-Dimensional Medical Image Analysis Program for the Objective Assessment of Orbital Disease, NRF 안와질환의 객관적평가를 위한 컴퓨터 기반 삼차원 의학영상분석프로그램의 개발, 한국연구재단
2019 - 2020	Korean Music Reproducing System based on Cultural Aesthetics, NRF 문화적 심미성 기반 한국형 음악 리프로듀싱 시스템, 한국연구재단

F. Honors and Awards

2026	Grand Prize, Nota AI On-Device AI Optimization Competition Nota-KCC 온디바이스 AI 최적화 경진대회 대상
2024	MIST International Assignment Training Fellowship 과학기술정보통신부 해외 파견 교육 연구 지원 프로그램
2021 - 2023	Chung-Ang University Graduate Research Scholarship 중앙대학교 대학원 연구 장학금
2021	Top 10% place of the Kaggle CommonLit Readability Prize Competition

2018	Kaggle CommonLit Readability 경진 대회 Advanced Data Analytics Semi-Professional (ADsP) 데이터분석 준전문가
2018	Grand Prize Award of the Chung-Ang University Da Vinci College of Liberal Arts Creative Credit 중앙대학교 다빈치 교양대학교 창의학점제 대상
2017	Encouragement Award of Korea Tourism Organization-sponsored Tourism Venture Forum University Student Analytics Contest 한국관광공사 주최 관광벤처포럼 대학생 analytics 공모전 장려상

G. Academic Services

Conference Reviewer: AAAI, CVPR, ACM MM

H. Skills

Techniques: Python, C++, SQL, R, Latex, Git, Docker

Machine Learning Tools: Pytorch, Tensorflow, Pandas, scikit-learn

I. Google Scholar

URL <https://scholar.google.com/citations?user=WLWrYKoAAAAJ&hl=ko>