

Curriculum Vitae

A. Personal Identification

Name Heon-Sung Park
Position Ph.D. student, School of Computer Science and Engineering
E-mail hopo5798@gmail.com
Homepage <http://air.cau.ac.kr/>
Tel and Fax +82-10-3771-2054
Address School of CSE, Chung-Ang Univ., 84 Heukseok-Ro, Dongjak-Gu, Seoul 06974, Korea
Interest Continual Learning, On-Device AI, Sensor-based Human Activity Recognition, Neural Architecture Search

B. Education

2022 – Ph.D., in Dept. of Computer Science and Engineering, Chung-Ang Univ.
Academic Adviser: Prof. Dae-Won Kim
2020 – 2022 Master student, in Dept. of Computer Science and Engineering, Chung-Ang Univ.
Academic Adviser: Prof. Dae-Won Kim
2014 – 2020 B.S. in Dept. of Information Technology, Silla Univ.

C. International Publications

C.1. Published from SCI(E) Journals

Heon-Sung Park, Hyeon-Chang Chu, Min-Kyung Sung, Chaewoon Kim, Jeongwon Lee, Dae-Won Kim and Jaesung Lee
Survey on Replay-Based Continual Learning and Empirical Validation on Feasibility in Diverse Edge Devices Using a Representative Method
Mathematics, July **2025**
Acknowledgement: IITP-2021-0-01341 (Prof. J. Lee), NRF- 2023R1A2C100674511 (Prof. D.-W. Kim)

Heon-Sung Park, Min-Kyung Sung, Dae-Won Kim and Jaesung Lee
Real-Time On-Device Continual Learning Based on a Combined Nearest Class Mean and Replay Method for Smartphone Gesture Recognition
Sensors, January **2025**
Acknowledgement: IITP-2021-0-01341 (Prof. J. Lee), NRF- 2023R1A2C100674511 (Prof. D.-W. Kim), CAU-GRS (Prof. D.-W. Kim)

C.2. Published from International Conference Papers

Heon-Sung Park, Jaegyun Park, Dae-Won Kim and Jaesung Lee
CGRS: Continual Gesture Recognition System
IEEE International Conference on Consumer Electronics, Las Vegas, USA, 5-8 January **2024**
Acknowledgement: IITP-2021-0-01341 (Prof. J. Lee), NRF- 2023R1A2C100674511 (Prof. D.-W. Kim)

D. Domestic Publications

D.1. Published from KCI Journals

D.2. Published from Domestic Conferences

Heon-Sung Park and Dae-Won Kim
Continual Gesture Learning with Pre-trained Prototypes
Proceedings of the Korea Computer Congress (KCC), 776-778, **2025**
Publisher: 한국정보과학회

Cheol-Ho Choi, Jin-Yu Lee, **Heon-Sung Park**, Kwang-Baek Kim
Defect Extraction of Ceramic Image using Fuzzy Clustering Based Enhanced Fuzzy Binarization
Proceedings of the Korean Society of Computer Information Conference, 27(1):23-26, January **2019**
Publisher: 한국컴퓨터정보학회, [HTTP://koreascience.kr/article/CFKO201909258121406.page](http://koreascience.kr/article/CFKO201909258121406.page)

E. Projects

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| 2025 | The Development of Automatic Search Technology for Optimal Hyperparameters for AI model, HYUNDAI
AI 모델 개발을 위한 최적 하이퍼 파라미터 자동 탐색 기술 개발, 현대자동차 |
| 2024 | Development of Deep Learning CT Shortening Algorithm to Improve the Accuracy of Structural Adhesive Inspection, HYUNDAI
구조용 접착제 검사 정확도 향상을 위한 딥러닝 CT 단축 알고리즘 개발, 현대자동차 |
| 2023 - | Sustainable Learning Machines for On-Device Holistic Intelligence, NRF
On-Device Holistic Intelligence 를 위한 Sustainable Learning Machines 기술 개발, 한국연구재단 |
| 2022 - 2025 | 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 - 2022 | 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 |
| 2020 - 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 |

F. Honors and Awards

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| 2026 | Grand Prize, Nota AI On-Device AI Optimization Competition
Nota-KCC 온디바이스 AI 최적화 경진대회 대상 |
| 2022 - 2024 | Chung-Ang University Graduate Research Scholarship
중앙대학교 대학원 연구 장학금 |
| 2019 | Best Paper Award, Korean Society of Computer Information Winter Conference
한국컴퓨터정보학회 동계학술대회 우수논문상 |

G. Skills

Techniques: Python, C/C++, Git, Docker

Machine Learning Tools: PyTorch, TensorFlow, scikit-learn

On-Device Deployment: Android, TensorFlow Lite (LiteRT), NVIDIA Jetson, Raspberry Pi

H. Google Scholar

URL <https://scholar.google.co.kr/citations?user=ghMtcQEAAAAJ&hl=ko&oi=ao>