Gyeong-hyeon Kim

PH.D. STUDENT · CHUNG-ANG UNIVERSITY

Room# 312, The 2nd Engineering Bldg (Bldg# 208), 84 Heukseok-ro, Dongjak-gu, Seoul, 06974, South Korea

✉ leonardkkh@cau.ac.kr | 🏠 gyeonghyeon.netlify.app | ⬡ ghyeonkk | 🔗 gyeong-hyeon-kim-3aa89817a | 🎓 Gyeong-hyeon Kim

Research Interest

Machine learning, Deep learning, Computer vision, Video understanding
(Current Focus) Action segmentation, Action anticipation

Education

Chung-Ang University *Seoul, South Korea*

Ph.D. in Computer Science and Engineering *Mar. 2023 - Present*
- *Advisor*: Eunwoo Kim

Chung-Ang University *Seoul, South Korea*

M.S. in Computer Science and Engineering *Mar. 2021 - Feb. 2023*
- *Dissertation title*: "Temporal Action Segmentation with Alleviating Local Context Fading"
- *Advisor*: Eunwoo Kim
- Overall GPA: 4.39/4.5

Chung-Ang University *Seoul, South Korea*

B.S. in Computer Science and Engineering *Mar. 2014 - Feb. 2021*
- Overall GPA: 3.81/4.5

Publications

INTERNATIONAL JOURNAL

Growing a Brain with Sparsity-Inducing Generation for Continual Learning *Jul. 2023*

Hyundong Jin, **Gyeong-hyeon Kim**, Chanho Ahn, and Eunwoo Kim

Proceedings of the IEEE/CVF International Conference on Computer Vision (**ICCV 2023**)

GhostNeXt: Rethinking Module Configurations for Efficient Model Design *Mar. 2023*

Kiseong Hong, **Gyeong-hyeon Kim**, and Eunwoo Kim

Applied Sciences, vol. 13, no. 5

Stacked Encoder-Decoder Transformer with Boundary Smoothing for Action Segmentation *Dec. 2022*

Gyeong-hyeon Kim, and Eunwoo Kim

Electronics Letters, vol. 58, no. 25, pp. 972-974

Projects

Time-Series Action Prediction and Segmentation

Funded by Hyundai Construction Equipment *Mar. 2023 - Dec. 2023*
- This project aims to develop high-performing deep learning models to learn and segment time-series actions for various equipments.

Customized Neural Architecture Search and Proposal

Funded by Samsung SDS *Mar. 2021 - Oct. 2021*
- This project aims to develop customized neural architecture search technology for visual tasks.
- Co-worked with Samsung SDS AI Vision Lab.

Pose Estimation for Bin-Picking with a 3D Model

Funded by Doosan Digital Innovation *Oct. 2020 - Dec. 2020*
- This project develops exact 6D pose estimation and instance segmentation algorithms for a bin-picking problem of a robot.

Honors & Awards

DOMESTIC

2020 **3rd Place**, NIPA Artificial Intelligence Problem Solving Contest (Tile Fine Crack Detection)
2020 **3rd place**, Davinci Open Source SW·AI Deep Learning Hackathon

Experience

Samsung Junior Software Cup Mentor

College Student Mentor *Sep. 2020 - Nov. 2020*
- Mentored elementary, middle, and high school students as a college student mentor with an employee mentor.
- Conducted mentoring and feedback for the software implementation of mentee ideas.

Patents

Apparatus and Method for Classifying Motion of Objects in Video *May. 2023*

Eunwoo Kim, **Gyeong-Hyeon Kim**
- Korea patent (applied) No. 10-2023-0056528

Teaching Experience

Teaching Assistant

2022-Spring **Capstone Design (56120)**
2021-Spring **Algorithms (13601)**

Skills

Programming Python, C/C++, Java, OpenCV
Deep Learning PyTorch, TensorFlow
Languages Korean, English