Jungin Park

Ph.D. Candidate · Yonsei University

Digital Image Media Laboratory, C129, The 3rd Engineering Building, Yonsei-ro 50, Seodaemun-gu, Seoul, Rep. of KOREA

(+82) 10-2330-8766 | newrun@yonsei.ac.kr | park-jungin.github.io | park-jungin | Jungin Park

Interests

Main Topics   Video understanding, 2D/3D computer vision, unsupervised learning, meta-learning, machine learning.
Current Focus   Video-language multi-modal learning, temporal causality reasoning, parameter-efficient tuning.

Education

Yonsei University   *Seoul, S.Korea*
Ph.D. Candidate in Department of Electrical and Electronic Engineering   *Mar. 2018 - Present*
- Working with Prof. Kwanghoon Sohn.

Yonsei University   *Seoul, S.Korea*
B.E. in Department of Electrical and Electronic Engineering   *Mar. 2012 - Feb. 2018*

Publication

International Journal

"Language-Guided Recursive Spatiotemporal Graph Modeling for Video Summarization"
Jungin Park, Jiyoung Lee, and Kwanghoon Sohn   *Dec. 2022 (Submitted)*
- IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**). (Under Review)

International Conference

"Dual-path Adaptation from Image to Video Transformers"
Jungin Park*, Jiyoung Lee*, and Kwanghoon Sohn   *Jun. 2023*
- IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**).

"PartMix: Regularization Strategy to Learn Part Discovery for Visible-Infrared Person Re-identification"
Minsu Kim, Seungryong Kim, Jungin Park, Seongheon Park, and Kwanghoon Sohn   *Jun. 2023*
- IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**).

"Language-free Training for Zero-shot Video Grounding"
Dahye Kim, Jungin Park, Jiyoung Lee, Seongheon Park, and Kwanghoon Sohn   *Jan. 2023*
- IEEE/CVF Winter Conference on Applications of Computer Vision (**WACV**).

"PointFix: Learning to Fix Domian Bias for Robust Online Stereo Adaptation"
Kwonyoung Kim, Jungin Park, Jiyoung Lee, Dongbo Min, and Kwanghoon Sohn   *Oct. 2022*
- European Conference on Computer Vision (**ECCV**).

"Probabilistic Representations for Video Contrastive Learning"
Jungin Park, Jiyoung Lee, Ig-Jae Kim, and Kwanghoon Sohn   *Jun. 2022*
- IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**).

"Pin the Memory: Learning to Generalize Semantic Segmentation"
Jin Kim, Jiyoung Lee, Jungin Park, Dongbo Min, and Kwanghoon Sohn   *Jun. 2022*
- IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**).

"Self-Balanced Learning for Domain Generalization"
Jin Kim, Jiyoung Lee, Jungin Park, Dongbo Min, and Kwanghoon Sohn   *Sep. 2021*
- IEEE International Conference on Image Processing (**ICIP**).

"Bridge to Answer: Structure-aware Graph Interaction Network for Video Question Answering"
Jungin Park, Jiyoung Lee, and Kwanghoon Sohn   *Jun. 2021*
- IEEE/CVF Conference on Computer Vision and Pattern Recognition (**CVPR**).

"Cross-Domain Grouping and Alignment for Domain Adaptive Semantic Segmentation"

Minsu Kim, Sunghun Joung, Seungryong Kim, **Jungin Park**, Ig-jae Kim, and Kwanghoon Sohn   *Dec. 2020*
- Thirty-Fifth AAAI Conference on Artificial Intelligence (**AAAI**).

"SumGraph: Video Summarization via Recursive Graph Modeling"

Jungin Park*, Jiyoung Lee*, Ig-jae Kim, and Kwanghoon Sohn (* indicates equal contribution.)   *Aug. 2020*
- European Conference on Computer Vision (**ECCV**).

"Context-Aware Emotion Recognition Networks"

Jiyoung Lee, Seugnryong Kim, Sunok Kim, **Jungin Park**, and Kwanghoon Sohn   *Oct. 2019*
- IEEE International Conference on Computer Vision (**ICCV**).

"Video Summarization by Learning Relationships between Action and Scene"

Jungin Park, Jiyoung Lee, Sangryul Jeon, Seugnryong Kim, and Kwanghoon Sohn   *Oct. 2019*
- IEEE International Conference on Computer Vision Workshop (**ICCV Workshop-CoVieW**).

"Graph Regularization Network with Semantic Affinity for Weakly-supervised Temporal Action Localization"

Jungin Park, Jiyoung Lee, Sangryul Jeon, Seugnryong Kim, and Kwanghoon Sohn   *Sep. 2019*
- IEEE International Conference on Image Processing (**ICIP**), Oral Presentation

"Learning to Detect, Associate, and Recognize Human Actions and Surrounding Scenes in Untrimmed Videos"

Jungin Park, Sangryul Jeon, Seugnryong Kim, Jiyoung Lee, Sunok Kim, and Kwanghoon Sohn   *Oct. 2018*
- ACM Multimedia Workshop - The 1st Workshop and Challenge on Comprehensive Video Understanding in the Wild (**ACMMM Workshop**).

Honors & Awards

2019	**Outstanding 100 National Research Projects**, Research Assistant	*Ministry of Science and ICT, S. Korea*
2019	**3rd Award**, The 2nd Workshop and Challenge on Comprehensive Video Understanding in the Wild (CoVieW 2019 ICCV Challenge)	*ICCVW*
2019	**2nd Award**, Workshop on Frontiers of Electrical Engineering (FREE) 2019	*Yonsei University*

Invited Talks

2022	**Poster Presentation**, Korean Conference on Computer Vision (KCCV)	*KCVS*
2022	**AI Tech Talk**, Naver CLOVA	*Naver Corporation*
2021	**AI Author Meetup**, Naver AI LAB	*Naver Corporation*
2021	**Online Presentation**, Korean Conference on Computer Vision (KCCV)	*KCVS*

Research Projects

Development of Multimodal-based General-purpose Social Artificial Intelligence Technology   *Seoul, S.Korea*

Funded by Yonsei University-Yonsei Signature Research Cluster.   *Apr. 2022 - Present*
- Developed an algorithm for computer vision with multi-modal data.

Development of Complex Situational Awareness and Prediction Technology through Multi-modal Data Fusion and Social Artificial Intelligence   *Seoul, S.Korea*

Funded by Ministry of Science, Mid-level Research.   *Mar. 2021 - Present*
- Developed an algorithm for computer vision with multi-modal data.

Development of AI Technology for Continuously Improves according to the Changing Situation in the Real World   *Seoul, S.Korea*

Funded by Institute of Information & Communication Technology.   *Apr. 2020 - Mar. 2022*
- Developed an algorithm for computer vision with meta-learning.

Fundamental Study of Vision Algorithms for Comprehensive and Through Understanding of Videos   *Seoul, S.Korea*

Funded by Ministry of Science, ICT and Future Planning.   *May. 2018 - Dec. 2020*
- Developed an algorithm for understanding untrimmed videos.

Patent

"Video Question Answering Apparatus and Method based on Graph Interaction"

JUNGIN PARK AND KWANGHOON SOHN   *Jan. 2021*

• Korea Patent, 10-2022-0011919

"Video Summarization Apparatus and Method through Recursive Graph Modeling"

JUNGIN PARK AND KWANGHOON SOHN   *Dec. 2020*

• Korea Patent, 10-2198480. PCT/KR2020/010755

"Video Action Recognition and Localization Apparatus and Method"

JUNGIN PARK AND KWANGHOON SOHN   *Oct. 2020*

• Korea Patent, 10-2174658, PCT/KR2019/004798

Professional Activities

Reviewer

IEEE TPAMI, CVPR, ECCV, AAAI, WACV, BMVC

Teaching

Yonsei University, Dept. of Electrical and Electronic Engineering   *Seoul, S.Korea*

TEACHING ASSISTANT.   *Sep. 2018 - Jun. 2019*

• Electrical and electronic engineering experiments: fundamentals, Digital signal processing.

Skills

Programming   Python, C/C++, Ruby, MATLAB, OpenCV, LaTeX, Linux
Deep learning   PyTorch, Tensorflow, Keras
Languages   Korean, English