CONTACT	
INCODMATION	. 1

Adobe

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EMPLOYMENT HISTORY

Adobe Research, San Jose, CA

Senior Research Scientist 2, Co-Creation for Audio, Video, and Animation Org	Feb 2022 – present
Senior Research Scientist, Creative Intelligence Lab	Jul 2019 – Feb 2022
Research Scientist 2, Creative Intelligence Lab	Jun 2017 – Jun 2019
Research Scientist, Creative Intelligence Lab	Oct 2015 – Jun 2017
Research Intern, Imagination Lab	Mar 2015 – Apr 2015
Research Intern, Imagination Lab	Jun 2014 – Sep 2014

Microsoft Research Asia, Beijing, China

Research Intern, Visual Computing Group (Mentor: Yasuyuki Matsushita) Sep 2010 – Aug 2011

EDUCATION

KAIST, Daejeon, Korea

Ph.D. in Electrical Engineering, Advised by Prof. In So Kweon	Sep 2009 – Aug 2015
M.S. in Electrical Engineering, Advised by Prof. In So Kweon	Mar 2008 – Aug 2009

Yonsei University, Seoul, Korea

B.S. in Electronic Engineering, High Honors at Graduation (GPA: 4.02/4.3) Mar 2000 – Feb 2008

PUBLICATIONS

[GOOGLE SCHOLAR]

(* INDICATES EQUAL CONTRIBUTION)

- Seokju Cho, Jiahui Huang, Jisu Nam, Honggyu An, Seungryong Kim, Joon-Young Lee, "Local All-Pair Correspondence for Point Tracking", In Proc. of European Conference on Computer Vision (ECCV), 2024
- 2. Mingi Kwon, Seoung Wug Oh, Yang Zhou, Difan Liu, Joon-Young Lee, Haoran Cai, Baqiao Liu, Feng Liu, Youngjung Uh, "Harnessing Text-to-Image Models for Video Generation", *In Proc. of European Conference on Computer Vision* (ECCV), 2024
- 3. David Chuan-En Lin, Fabian Caba Heilbron, Joon-Young Lee, Oliver Wang, Nikolas Martelaro, "VideoMap: Supporting Video Editing Exploration, Brainstorming, and Prototyping in the Latent Space", *In Proc. of ACM Conference on Creativity & Cognition* (**C&C**), 2024
- 4. David Chuan-En Lin, Fabian Caba Heilbron, Joon-Young Lee, Oliver Wang, Nikolas Martelaro, "Videogenic: Identifying Highlight Moments in Videos with Professional Photographs as a Prior", *In Proc. of ACM Conference on Creativity & Cognition* (**C&C**), 2024
- 5. Ho Kei Cheng, Seoung Wug Oh, Brian Price, Joon-Young Lee, Alexander Schwing, "Putting the Object Back into Video Object Segmentation", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2024
- 6. Seokju Cho, Jiahui Huang, Seungryong Kim, Joon-Young Lee, "FlowTrack: Revisiting Optical Flow for Long-Range Dense Tracking", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2024
- 7. Chuong Minh Huynh, Seoung Wug Oh, Abhinav Shrivastava, Joon-Young Lee, "MaGGIe: Masked Guided Gradual Human Instance Matting", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2024
- 8. Gihyun Kwon, Simon Jenni, Dingzeyu Li, Joon-Young Lee, Jong Chul Ye, Fabian Caba Heilbron, "Concept Weaver: Enabling Multi-Concept Fusion in Text-to-Image Models", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2024
- Adrit Rao, Andrea Fisher, Ken Chang, John Panagides, Katherine McNamara, Joon-Young Lee, Oliver Aalami, "IMIL: Interactive Medical Image Learning Framework", CVPR 2024 Workshop on Domain adaptation, Explainability, Fairness in AI for Medical Image Analysis (CVPRW-DEFAIMIA), 2024

- 10. Ho Kei Cheng, Seoung Wug Oh, Brian Price, Alexander Schwing, Joon-Young Lee, "Tracking Anything with Decoupled Video Segmentation", *In Proc. of IEEE International Conference on Computer Vision* (ICCV), 2023
- 11. Maksym Bekuzarov*, Ariana Bermudez*, Joon-Young Lee, Hao Li, "XMem++: Production-level Video Segmentation From Few Annotated Frames", *In Proc. of IEEE International Conference on Computer Vision* (ICCV), 2023
- 12. Dawit Mureja Argaw, Joon-Young Lee, Markus Woodson, In So Kweon, Fabian Caba Heilbron, "Long-range Multimodal Pretraining for Movie Understanding", *In Proc. of IEEE International Conference on Computer Vision* (ICCV), 2023
- 13. Adrit Rao, Joon-Young Lee, Oliver Aalami, "Studying the Impact of Augmentations on Medical Confidence Calibration", *ICCV 2023 Workshop on Computer Vision for Automated Medical Diagnosis* (*ICCVW-CVAMD*), 2023
- 14. Jiahui Huang, Leonid Sigal, Kwang Moo Yi, Oliver Wang, Joon-Young Lee, "INVE: Interactive Neural Video Editing", *Computer Graphics International (CGI)*, 2023
- 15. Miran Heo, Sukjun Hwang, Jeongseok Hyun, Hanjung Kim, Seoung Wug Oh, Joon-Young Lee, Seon Joo Kim, "A Generalized Framework for Video Instance Segmentation", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2023
- Kwanyong Park, Sanghyun Woo, Seoung Wug Oh, In So Kweon, Joon-Young Lee, "Mask-guided Matting in the Wild', In Proc. of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023
- 17. Miran Heo*, Sukjun Hwang*, Seoung Wug Oh, Joon-Young Lee, Seon Joo Kim, "VITA: Video Instance Segmentation via Object Token Association", *In Proc. of Neural Information Processing Systems* (NeurIPS), 2022
- 18. David Chuan-En Lin, Fabian Caba Heilbron, Joon-Young Lee, Oliver Wang, Nikolas Martelaro, "VideoMap: Video Editing in Latent Space", *NeurIPS 2022 Workshop on Machine Learning for Creativity and Design (NeurIPS Workshop-ML4CD)*, 2022
- David Chuan-En Lin, Fabian Caba Heilbron, Joon-Young Lee, Oliver Wang, Nikolas Martelaro,
 "Videogenic: Video Highlights via Photogenic Moments", NeurIPS 2022 Workshop on Machine Learning for Creativity and Design (NeurIPS Workshop-ML4CD), 2022
- Kwanggyoon Seo, Seoung Wug Oh, Jingwan Lu, Joon-Young Lee, Seonghyeon Kim, Junyon Noh, "StylePortraitVideo: Editing Portrait Videos with Expression Optimization", *In Proc. of Pacific Graphics (PG)*, 2022
- 21. Hongje Seong, Seoung Wug Oh, Brian Price, Euntai Kim, Joon-Young Lee, "One-Trimap Video Matting", *In Proc. of European Conference on Computer Vision* (ECCV), 2022
- 22. Sanghyun Woo, Kwanyong Park, Seoung Wug Oh, In So Kweon, Joon-Young Lee, "Bridging Images and Videos: A Simple Learning Framework for Large Vocabulary Video Object Detection", In Proc. of European Conference on Computer Vision (ECCV), 2022
- 23. Sanghyun Woo, Kwanyong Park, Seoung Wug Oh, In So Kweon, Joon-Young Lee, "Tracking by Associating Clips", *In Proc. of European Conference on Computer Vision* (ECCV), 2022
- 24. Dawit Mureja Argaw, Fabian Caba Heilbron, Joon-Young Lee, Markus Woodson, In So Kweon, "The Anatomy of Video Editing: A Dataset and Benchmark Suite for AI-Assisted Video Editing", In Proc. of European Conference on Computer Vision (ECCV), 2022
- 25. Dahun Kim, Sanghyun Woo, Joon-Young Lee, In So Kweon, "Dense Pixel-level Interpretation of Dynamic Scenes with Video Panoptic Segmentation", *IEEE Transactions on Image Processing* (TIP), 2022
- 26. Kwanyong Park, Sanghyun Woo, Seoung Wug Oh, In So Kweon, Joon-Young Lee, "Per-Clip Video Object Segmentation", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2022

- 27. Seonguk Seo, Joon-Young Lee, Bohyung Han, "Unsupervised Learning of De-biased Representation with Pseudo-bias Attribute", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2022
- 28. Miran Heo, Sukjun Hwang, Seoung Wug Oh, Joon-Young Lee, Seon Joo Kim, "Integrating Pose and Mask Predictions for Multi-person in Videos", CVPR 2022 Workshop on Efficient Deep Learning for Computer Vision (CVPRW-ECV), 2022
- 29. Seonguk Seo, Joon-Young Lee, Bohyung Han, "Information-Theoretic Bias Reduction from the Causal View of Spurious Correlation", *In Proc. of AAAI Conference on Artifical Intelligence* (**AAAI**), 2022
- 30. Hae-Gon Jeon, Sunghoon Im, Jaesung Choe, Minjun Kang, Joon-Young Lee, Martial Hebert, "CMSNet: Deep Color and Monochrome Stereo", *International Journal of Computer Vision* (**IJCV**), 2022
- 31. Sanghyun Woo, Dahun Kim, Joon-Young Lee, In So Kweon, "Global Context and Geometric Priors for Effective Non-Local Self-Attention", *In Proc. of British Machine Vision Conference* (**BMVC**), 2021
- 32. Adrit Rao, Jongchan Park, Sanghyun Woo, Joon-Young Lee, Oliver Aalami, "Studying the Effects of Self-Attention for Medical Image Analysis", *ICCV 2021 Workshop on Computer Vision for Automated Medical Diagnosis* (ICCVW-CVAMD), 2021
- 33. Hongje Seong, Seoung Wug Oh, Joon-Young Lee, Seongwon Lee, Suhyeon Lee, Euntai Kim, "Hierarchical Memory Matching Network for Video Object Segmentation", *In Proc. of IEEE International Conference on Computer Vision* (ICCV), 2021
- 34. Juan Carlos Leon, Fabian Caba Heilbron, Long Mai, Federico Perazzi, Joon-Young Lee, Pablo Arbelaez, Bernard Ghanem, "APES: Audiovisual Person Search in Untrimmed Video", *Multimodal Learning and Applications Workshop in conjunction with CVPR 2021* (CVPRW-MULA), 2021
- 35. Sanghyun Woo, Dahun Kim, Joon-Young Lee, In So Kweon, "Learning to Associate Every Segment for Video Panoptic Segmentation", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2021
- 36. Jaedong Hwang, Seoung Wug Oh, Joon-Young Lee, Bohyung Han, "Exemplar-Based Open-Set Panoptic Segmentation Network", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2021
- 37. Gunhee Nam, Miran Heo, Seoung Wug Oh, Joon-Young Lee, Seon Joo Kim, "Polygonal Point Set Tracking", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2021
- 38. Seoung Wug Oh, Joon-Young Lee, Ning Xu, Seon Joo Kim, "Space-time Memory Networks for Video Object Segmentation with User Guidance", *IEEE Transactions on Pattern Analysis and Machine Intelligence* (**TPAMI**), 2020
- 39. Seonguk Seo, Joon-Young Lee, Bohyung Han, "URVOS: Unified Referring Video Object Segmentation Network with a Large-Scale Benchmark", *In Proc. of European Conference on Computer Vision* (ECCV), 2020
- 40. Shubham Agarwal, Trung Bui, Joon-Young Lee, Ioannis Konstas, Verena Rieser, "History for Visual Dialog: Do we really need it?", *In Proc. of Annual Meeting of the Association for Computational Linguistics* (ACL), 2020
- 41. Dahun Kim, Sanghyun Woo, Joon-Young Lee, In So Kweon, "Video Panoptic Segmentation", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2020
- 42. Juan Carlos Leon, Fabian Caba Heilbron, Long Mai, Federico Perazzi, Joon-Young Lee, Pablo Arbelaez, Bernard Ghanem, "Active Speakers in Context", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2020

- 43. Zijun Wei, Jianming Zhang, Zhe Lin, Joon-Young Lee, Niranjan Balasubramanian, Minh Hoai Nguyen, Dimitris Samaras, "Learning Visual Emotion Representations from Web Data", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2020
- 44. Jongchan Park*, Sanghyun Woo*, Joon-Young Lee, In-So Kweon, "A Simple and Light-weight Attention Module for Convolutional Neural Networks", *International Journal of Computer Vision* (IJCV), 2020
- 45. Dahun Kim*, Sanghyun Woo*, Joon-Young Lee, In So Kweon, "Recurrent Temporal Aggregation Framework for Deep Video Inpainting", *IEEE Transactions on Pattern Analysis and Machine Intelligence* (**TPAMI**), 2020
- 46. Seoung Wug Oh, Joon-Young Lee, Ning Xu, Seon Joo Kim, "Video Object Segmentation using Space-Time Memory Networks", *In Proc. of IEEE International Conference on Computer Vision* (ICCV), 2019 (Oral)
- 47. Seoung Wug Oh, Sungho Lee, Joon-Young Lee, Seon Joo Kim, "Onion-Peel Networks for Deep Video Completion", *In Proc. of IEEE International Conference on Computer Vision* (ICCV), 2019
- 48. Xin Ye, Zhe Lin, Joon-Young Lee, Jianming Zhang, Shibin Zheng, Yezhou Yang, "GAPLE: Generalizable Approaching Policy LEarning for Robotic Object Searching in Indoor Environment", *IEEE Robotics and Automation Letters* (**RA-L**, Proc. of **IROS**), 2019
- 49. Xingyu Liu, Joon-Young Lee, Hailin Jin, "Learning Video Representations from Correspondence Proposals", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2019 (Oral)
- 50. Seoung Wug Oh, Joon-Young Lee, Ning Xu, Seon Joo Kim, "Fast User-Guided Video Object Segmentation by Interaction-and-Propagation Networks", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2019
- 51. Dahun Kim*, Sanghyun Woo*, Joon-Young Lee, In So Kweon, "Deep Video Inpainting", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2019
- 52. Dahun Kim*, Sanghyun Woo*, Joon-Young Lee, In So Kweon, "Deep Blind Video Decaptioning by Temporal Aggregation and Recurrence", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2019
- 53. Jiyoung Jung, Joon-Young Lee, In So Kweon, "One-Day Outdoor Photometric Stereo Using Skylight Estimation", *International Journal of Computer Vision* (**IJCV**), 2019
- Youngbae Hwang, Joon-Young Lee, In So Kweon, and Seon Joo Kim, "Probabilistic Moving Least Squares with Spatial Constraints for Nonlinear Color Transfer Between Images", Computer Vision and Image Understanding (CVIU), 2019
- 55. Sanghyun Woo*, Jongchan Park*, Joon-Young Lee, In So Kweon, "CBAM: Convolutional Block Attention Module", *In Proc. of European Conference on Computer Vision* (ECCV), 2018
- Fabian Caba Heilbron, Joon-Young Lee, Hailin Jin, Bernard Ghanem, "What do I Annotate Next? An Empirical Study of Active Learning for Action Localization", In Proc. of European Conference on Computer Vision (ECCV), 2018
- 57. Rameswar Panda, Jianming Zhang, Haoxiang Li, Joon-Young Lee, Xin Lu, Amit K. Roy-Chowdhury, "Contemplating Visual Emotions: Understanding and Overcoming Dataset Bias", *In Proc. of European Conference on Computer Vision* (ECCV), 2018
- 58. Wei-Chih Hung, Jianming Zhang, Xiaohui Shen, Zhe Lin, Joon-Young Lee, Ming-Hsuan Yang, "Learning to Blend Photos", *In Proc. of European Conference on Computer Vision* (ECCV), 2018
- Inwook Shim, Tae-Hyun Oh, Joon-Young Lee, Dong-Geol Choi, Jinwook Choi, and In So Kweon, "Gradient-based Camera Exposure Control for Outdoor Mobile Platforms", *IEEE Transactions on Circuits and Systems for Video Technology* (TCSVT), 2018

- 60. Jongchan Park*, Sanghyun Woo*, Joon-Young Lee, In So Kweon, "BAM: Bottleneck Attention Module", *In Proc. of British Machine Vision Conference* (BMVC), 2018 (Oral)
- 61. Seoung Wug Oh, Joon-Young Lee, Kalyan Sunkavalli, Seon Joo Kim, "Fast Video Object Segmentation by Reference-Guided Mask Propagation", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2018 (Spotlight)
- 62. Jongchan Park, Joon-Young Lee, Donggeun Yoo, In So Kweon, "Distort-and-Recover: Color Enhancement using Deep Reinforcement Learning", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2018
- 63. Gyeongmin Choe, Seong-Heum Kim, Sunghoon Im, Joon-Young Lee, Srinivasa Narasimhan, and In So Kweon. "RANUS: RGB and NIR Urban Scene Dataset for Deep Scene Parsing", *IEEE Robotics and Automation Letters* (RA-L), 2018
- 64. Zhuo Hui, Kalyan Sunkavalli, Joon-Young Lee, Sunil Hadap, Jian Wang, Aswin C. Sankaranarayanan, "Reflectance Capture using Univariate Sampling of BRDFs", *In Proc. of IEEE International Conference on Computer Vision* (ICCV), 2017
- 65. Xuaner Zhang, Joon-Young Lee, Kalyan Sunkavalli, and Zhaowen Wang, "Photometric Stabilization for Fast-forward Videos", *Computer Graphics Forum* (**CGF**, Proc of Pacific Graphics), Volume 36, Number 7, Pages 105-113, 2017
- 66. Yinda Zhang*, Shuran Song*, Ersin Yumer, Manolis Savva, Joon-Young Lee, Hailin Jin, Thomas Funkhouser, "Physically-Based Rendering for Indoor Scene Understanding Using Convolutional Neural Networks", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2017
- 67. Hao Hu, Zhaowen Wang, Joon-Young Lee, Zhe Lin, Guo-Jun Qi, "Temporal Domain Neural Encoder for Video Representation Learning", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition Workshops* (CVPRW), 2017
- 68. Jinwoong Jung, Beomseok Kim, Joon-Young Lee, Byungmoon Kim, Seungyong Lee, "Robust Upright Adjustment of 360 Spherical Panoramas", *The Visual Computer Journal* (TVCJ, Proc. Computer Graphics International), 2017
- 69. Jinwoong Jung, Joon-Young Lee, Byungmoon Kim, and Seungyong Lee, "Upright Adjustment of 360 Spherical Panoramas", *IEEE Virtual Reality* (VR) (Poster), 2017
- 70. Hae-Gon Jeon, Joon-Young Lee, Yudeog Han, Seon Joo Kim, and In So Kweon, "Generating Fluttering Pattern with Low Autocorrelation for Coded Exposure Imaging", *International Journal of Computer Vision* (IJCV), 2017
- 71. Youngjin Yoon, Hae-Gon Jeon, Donggeun Yoo, Joon-Young Lee, and In So Kweon, "Light Field Image Super-Resolution using Convolutional Neural Network", *IEEE Signal Processing Letters* (SLP), 2017
- 72. Hae-Gon Jeon, Joon-Young Lee, Yudeog Han, Seon Joo Kim, and In So Kweon, "Multi-Image Deblurring using Complementary Sets of Fluttering Patterns", *IEEE Transactions on Image Processing* (TIP), 2017
- 73. Seong-Heum Kim, Yu-Wing Tai, Joon-Young Lee, Jaesik Park, and In So Kweon, "Category-specific Salient View Selection via Deep Convolutional Neural Networks", *Computer Graphics Forum* (**CGF**), 2017
- 74. Youngjin Yoon, Gyeongmin Choe, Namil Kim, Joon-Young Lee, and In So Kweon, "Fine-scale Surface Normal Estimation using a Single NIR Image", *In Proc. of European Conference on Computer Vision* (ECCV), 2016
- 75. Joon-Young Lee, Kalyan Sunkavalli, Zhe Lin, Xiaohui Shen, and In So Kweon, "Automatic Content-Aware Color and Tone Stylization", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2016 (Spotlight)

- 76. Hae-Gon Jeon, Joon-Young Lee, Sunghoon Im, Hyowon Ha, and In So Kweon, "Stereo Matching with Color and Monochrome Cameras in Low-light Conditions", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2016
- 77. Inwook Shim, Seunghak Shin, Yunsu Bok, Kyungdon Joo, Dong-Geol Choi, Joon-Young Lee, Jaesik Park, Jun-Ho Oh, and In So Kweon, "Vision System and Depth Processing for DRC-HUBO+", *In Proc. of IEEE International Conference on Robotics and Automation* (ICRA), 2016
- 78. Donggeun Yoo, Sunggyun Park, Joon-Young Lee, Anthony Paek, and In So Kweon, "AttentionNet: Aggregating Weak Directions for Accurate Object Detection", *In Proc. of IEEE International Conference on Computer Vision* (ICCV), 2015
- 79. Hae-Gon Jeon, Joon-Young Lee, Yudeog Han, Seon Joo Kim, and In So Kweon, "Complementary Sets of Shutter Sequences for Motion Deblurring", *In Proc. of IEEE International Conference on Computer Vision* (ICCV), 2015
- 80. Youngjin Yoon, Hae-Gon Jeon, Donggeun Yoo, Joon-Young Lee, and In So Kweon, "Learning a Deep Convolutional Network for Light-Field Image Super-Resolution", *In Proc. of IEEE International Conference on Computer Vision Workshops* (ICCVW), 2015
- 81. Jiyoung Jung, Joon-Young Lee, Yekeun Jeong, and In So Kweon, "Time-of-flight sensor calibration for a color and depth camera pair", *IEEE Transactions on Pattern Analysis and Machine Intelligence* (**TPAMI**), 2015
- 82. Tae-Hyun Oh, Joon-Young Lee, Yu-Wing Tai, and In So Kweon, "Robust High Dynamic Range Imaging by Rank Minimization", *IEEE Transactions on Pattern Analysis and Machine Intelligence* (**TPAMI**), 2015
- 83. Jiyoung Jung, Joon-Young Lee, and In So Kweon, "One-day outdoor photometric stereo via skylight estimation", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2015 (Oral)
- 84. Donggeun Yoo, Sunggyun Park, Joon-Young Lee, and In So Kweon, "Multi-scale Pyramid Pooling for Deep Convolutional Representation", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition Workshops* (CVPRW), 2015
- 85. Kibaek Park, Seunghak Shin, Hae-Gon Jeon, Joon-Young Lee, and In So Kweon, "Motion Deblurring using Coded Exposure for a Wheeled Mobile Robot", *In Proc. of International Conference on Ubiquitous Robots and Ambient Intelligence* (URAI), 2014
- 86. Yukyung Choi, Chaehoon Park, Joon-Young Lee, and In So Kweon, "Robust Binary Feature using the Intensity Order", *In Proc. of Asian Conference on Computer Vision* (ACCV), 2014
- 87. Inwook Shim, Joon-Young Lee, and In So Kweon, "Auto-adjusting Camera Exposure for Outdoor Robotics using Gradient Information", *In Proc. of IEEE/RSJ International Conference on Intelligent Robots and Systems* (IROS), 2014
- 88. Youngbae Hwang*, Joon-Young Lee*, In So Kweon, and Seon Joo Kim, "Color Transfer using Probabilistic Moving Least Squares", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2014
- 89. Jiyoung Jung, Joon-Young Lee, and In So Kweon, "Noise aware depth denoising for a time-of-flight camera", *In Proc. of Korea-Japan Joint Workshop on Frontiers of Computer Vision* (FCV), 2014
- 90. Yudeog Han, Joon-Young Lee, and In So Kweon, "High Quality Shape from a Single RGB-D Image under Uncalibrated Natural Illumination", *In Proc. of IEEE International Conference on Computer Vision* (ICCV), 2013
- 91. Hae-Gon Jeon, Joon-Young Lee, Yudeog Han, Seon Joo Kim, and In So Kweon, "Fluttering Pattern Generation using Modified Legendre Sequence for Coded Exposure Imaging", *In Proc. of IEEE International Conference on Computer Vision* (ICCV), 2013

- 92. Joon-Young Lee, Jiyoung Jung, Yunsu Bok, Jaesik Park, Dong-Geol Choi, Yudeog Han, and In So Kweon, "Robust Computer Vision Techniques for High-quality 3D Modeling", *In Proc. of IAPR Asian Conference on Pattern Recognition* (ACPR), 2013
- 93. Tae-Hyun Oh, Joon-Young Lee, and In So Kweon, "High Dynamic Range Imaging by a Rank-1 Constraint", *In Proc. of IEEE International Conference on Image Processing* (ICIP), 2013
- 94. Joon-Young Lee, Yasuyuki Matsushita, Boxin Shi, In So Kweon, and Katsushi Ikeuchi, "Radiometric Calibration by Rank Minimization", *IEEE Transactions on Pattern Analysis and Machine Intelligence* (**TPAMI**), 2013
- 95. Tae-Hyun Oh, Joon-Young Lee, and In So Kweon, "Real-Time Motion Detection based on Discrete Cosine Transform", *In Proc. of IEEE International Conference on Image Processing* (**ICIP**), 2012
- 96. Jaesik Park, Joon-Young Lee, Yu-Wing Tai, and In So Kweon, "Modeling Photo Composition and Its Application to Photo Re-arrangement", *In Proc. of IEEE International Conference on Image Processing* (ICIP), 2012
- 97. Joon-Young Lee, Boxin Shi, Yasuyuki Matsushita, In So Kweon, and Katsushi Ikeuchi, "Radiometric Calibration by Transform Invariant Low-rank Structure", *In Proc. of IEEE Conference on Computer Vision and Pattern Recognition* (CVPR), 2011
- 98. Jiyoung Jung, Yekeun Jeong, Joon-Young Lee, Hanbyul Joo, and In So Kweon, "View-invariant Planar Object Detection for VisTRo", *In Proc. of International Conference on Ubiquitous Robots and Ambient Intelligence* (URAI), 2010
- 99. Jiyoung Jung, Yekeun Jeong, Joon-Young Lee, and In So Kweon, "Image Warping for View-invariant Object Matching using Stereo Camera", *In Proc. of Korea-Japan Joint Workshop on Frontiers of Computer Vision* (FCV), 2010

Honors & Awards

 Adobe MAX 2022 Sneaks Demo #InstantAdd 	Oct 2022
• 3rd (VIS track) in Large-scale Video Object Segmentation Challenge	Jun 2022
• 2021 Tech Excellence Award, Adobe	Jun 2021
 Outstanding Reviewer in CVPR 2021 	Jun 2021
• 1st (interactive track) / 4th (semi-supervised track) in the DAVIS Challenge	Jun 2019
GTC 2019 Top Poster Award	Mar 2019
 Adobe MAX 2018 Sneaks Demo #ProjectFastmask 	Oct 2018
• 1st Place Award in ChalearnLAP Inpainting Challenge Track 2 - video decaption	oning Sep 2018
 1st Place Award in The Interactive DAVIS Challenge 	Jun 2018
• Best poster award, The 9th International Workshop on Robust Computer Vision	Dec 2014
• Research Highlights of the year (2013), KAIST	Mar 2014
Qualcomm Innovation Award	Sep 2013
• Research Highlights of the year (2012), KAIST	Mar 2013
• Silver prize, 19th HumanTech Paper Award, Samsung Electronics Co., Ltd.	Feb 2013
 Excellent intern award, Microsoft Research Asia 	Aug 2011
High Honors at Graduation, Yonsei University	Feb 2008
 Full scholarship, Jeongsu Scholarship Foundation 	Mar 2006 – Feb 2008
Full scholarship, Yonsei University	Mar 2005 - Feb 2006

SERVICE

Area Chair

- The British Machine Vision Conference (BMVC), 2021/2022/2023
- European Conference on Computer Vision (ECCV), 2020
- IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2020
- International Conference on Computer Vision (ICCV), 2019

Organizer

- Large-scale Video Object Segmentation Workshop in conjunction with ICCV 2023
- Large-scale Video Object Segmentation Challenge Workshop in conjunction with CVPR 2022
- Large-scale Video Object Segmentation Challenge Workshop in conjunction with CVPR 2021

Reviewer

- Conference: CVPR (2016–), ICCV (2015–), ECCV (2016–), SIGGRAPH (2018), SIGGRAPH ASIA (2018), 3DV (2015, 2016), ACCV (2016), PG (2015), WACV (2015, 2016), ICRA (2017, 2019), IROS (2016)
- Journal: TPAMI, IJCV, TIP, CVIU

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