

Jaesik Park

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WORKING EXPERIENCES

- | | |
|--|--|
| Assistant Professor
<i>CSE and IPAI, Seoul National University (SNU)</i> <ul style="list-style-type: none">Principal Investigator of Visual and Geometric Intelligence Lab.Chief Professor of Student Affairs, IPAI (2024.09 – Present) | Seoul, Republic of Korea
2023.09 – Present |
| Associate Professor
<i>CSE and GSAI, Pohang University of Science and Technology (POSTECH)</i> | Pohang, Republic of Korea
2022.09 – 2023.08 |
| Assistant Professor
<i>CSE and GSAI, Pohang University of Science and Technology (POSTECH)</i> <ul style="list-style-type: none">Advised about 20 masters and Ph.D. studentsSelected as one of the POSTECH's Representative Research Achievements (2021)Received Outstanding Online Class Award (2020) and the Best EduTech Award (2021) | Pohang, Republic of Korea
2019.04 – 2022.08 |
| Staff Research Scientist
<i>Intelligent Systems Lab, Intel (Manager: Dr. Vladlen Koltun)</i> <ul style="list-style-type: none">Advised intern students from Stanford University, U.C. Berkeley, and Carnegie Mellon UniversityCo-creator of Open3D: open-sourced 3D vision library built from scratch (11.5+1.9k GitHub stars) | Santa Clara, CA, USA
2015.12 – 2019.03 |

EDUCATION

- | | |
|--|---|
| Ph.D. and M.S. in Electrical Eng.
<i>Korea Advanced Institute of Science and Technology (KAIST)</i> <ul style="list-style-type: none">Ph.D. thesis: Image-based 3D Modeling via Constrained Optimization (Advisor: Prof. In So Kweon, Co-advisor: Dr. Yu-Wing Tai)Master's thesis: Upsampling Low-resolution Image using Heterogeneous High-resolution Image (Advisor: Prof. In So Kweon) | Daejeon, Republic of Korea
2009.02 – 2011.02 & 2011.02 – 2015.08 |
| B.E. in Media Communication Eng.
<i>Hanyang University (<i>Summa cum laude</i>)</i> | Seoul, Republic of Korea
2005.03 – 2009.02 |

PUBLICATIONS

International

- [1] Minkyun Seo*, Hyungtae Lim*, Kanghee Lee, Luca Carlone, and **Jaesik Park**
BUFFER-X: Towards Zero-Shot Point Cloud Registration in Diverse Scenes
2503.07940 (arXiv), 2025
(*Joint first authors)
- [2] Sangmin Kim, Seunguk Do, and **Jaesik Park**
ShowMak3r: Compositional TV Show Reconstruction
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2025
- [3] Jaeah Lee, Changwoon Choi, Young Min Kim, and **Jaesik Park**
Recovering Dynamic 3D Sketches from Videos
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2025
- [4] Daneul Kim, Jaeah Lee, and **Jaesik Park**
Improving Editability in Image Generation with Layer-wise Memory
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2025
- [5] Hyungtae Lim, Daebeom Kim, Gunhee Shin, Jingnan Shi, Ignacio Vizzo, Hyun Myung, **Jaesik Park**, and Luca Carlone
KISS-Matcher: Fast and Robust Point Cloud Registration Revisited
Int. Conf. on Robotics and Automation (**ICRA**), 2025

- [6] Seungjoo Shin, **Jaesik Park**, and Sunghyun Cho
Locality-aware Gaussian Compression for Fast and High-quality Rendering
Int. Conf. on Learning Representations (**ICLR**), 2025
- [7] Ashish Kumar and **Jaesik Park**
Designing Concise ConvNets with Columnar Stages
Int. Conf. on Learning Representations (**ICLR**), 2025
- [8] Deepak Ghimire, Dayoung Kil, Seonghwan Jeong, **Jaesik Park**, and Seong-Heum Kim
One-cycle Structured Pruning with Stability Driven Structure Search
2501.13439 (arXiv), 2025
- [9] Ashish Kumar and **Jaesik Park**
Cross Resolution Encoding-Decoding For Detection Transformers
2410.04088 (arXiv), 2024
- [10] Seokjun Ahn*, Jungtaek Kim*, Minsu Cho, and **Jaesik Park**
Budget-Aware Sequential Brick Assembly with Efficient Constraint Satisfaction
Transactions on Machine Learning Research (**TMLR**), 2024
(*Joint first authors)
- [11] Joonghyuk Shin, Daehyeon Choi, and **Jaesik Park**
InstantDrag: Improving Interactivity in Drag-based Image Editing
ACM Special Interest Group on Graphics and Interactive Techniques (**SIGGRAPH Asia**), 2024
- [12] Minguk Kang, Richard Zhang, Connelly Barnes, Sylvain Paris, Suha Kwak, **Jaesik Park**, Eli Shechtman, Jun-Yan Zhu, and Taesung Park
Distilling Diffusion Models into Conditional GANs
European Conf. on Computer Vision (**ECCV**), 2024
- [13] Jungeon Kim, Soongjin Kim, **Jaesik Park**, and Seungyong Lee
Deep Cost Ray Fusion for Sparse Depth Video Completion
European Conf. on Computer Vision (**ECCV**), 2024
- [14] Nahyuk Lee, Juhong Min, Junha Lee, Seungwook Kim, Kanghee Lee, **Jaesik Park**, and Minsu Cho
3D Geometric Shape Assembly via Efficient Point Cloud Matching
Int. Conf. on Machine Learning (**ICML**), 2024
- [15] Changwoon Choi, Jaeah Lee, **Jaesik Park**, and Young Min Kim
3Doodle: Compact Abstraction of Objects with 3D Strokes
ACM Special Interest Group on Graphics and Interactive Techniques (**SIGGRAPH**), 2024
(Accepted as a journal track paper)
- [16] Seoyeon Kim, Minguk Kang, Dongwon Kim, **Jaesik Park**, and Suha Kwak
Extending CLIP's Image-Text Alignment to Referring Image Segmentation
Annual Conf. of the North American Chapter of the Assoc. for Computational Linguistics (**NAACL**), 2024
- [17] Ashish Kumar, Daneul Kim, **Jaesik Park**, and Laxmidhar Behera
Pick-or-Mix: Dynamic Channel Sampling for ConvNets
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2024
- [18] Chunghyun Park, Seungwook Kim, **Jaesik Park**, and Minsu Cho
Learning $SO(3)$ -Invariant Semantic Correspondence via Local Shape Transform
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2024
- [19] Ashish Kumar, **Jaesik Park**, and Laxmidhar Behera
High-Speed Stereo Visual SLAM for Low-Powered Computing Devices
IEEE Robotics and Automation Letters (**RAL**), vol. 9, issue 1, 2024
(invited to the **ICRA2024** oral presentation)
- [20] Seungjoo Shin and **Jaesik Park**
Binary Radiance Fields
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2023
(Received 30th **HumanTech Paper Award (Silver Prize)**, Samsung Electronics Corp.)

- [21] MinGuk Kang, Joonghyuk Shin, and **Jaesik Park**
StudioGAN: A Taxonomy and Benchmark of GANs for Image Synthesis
Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), 2023
- [22] Jaesung Choe, Christopher Choy, **Jaesik Park**, In So Kweon, and Animashree Anandkumar
Spacetime Surface Regularization for Neural Dynamic Scene Reconstruction
Int. Conf. on Computer Vision (**ICCV**), 2023
- [23] Joonghyuk Shin, Minguk Kang, and **Jaesik Park**
Fill-Up: Balancing Long-Tailed Data with Generative Models
2306.07200 (arXiv), 2023
- [24] Seoyeon Kim, Minguk Kang, and **Jaesik Park**
RISCLIP: Referring Image Segmentation Framework using CLIP
2306.08498 (arXiv), 2023
- [25] Seungwook Kim, Chunghyun Park, Yoonwoo Jeong, **Jaesik Park**, and Minsu Cho
Stable and Consistent Prediction of 3D Characteristic Orientation via Invariant Residual Learning
Int. Conf. on Machine Learning (**ICML**), 2023
- [26] Minguk Kang, Jun-Yan Zhu, Richard Zhang, **Jaesik Park**, Eli Shechtman, Sylvain Paris, and Taesung Park
Scaling up GANs for Text-to-Image Synthesis
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2023
(Accepted as a highlight paper (review score 5,5,5) - top 2.5% among 9,155 submissions)
- [27] Kwonyoung Ryu, Soonmin Hwang, and **Jaesik Park**
Instant Domain Augmentation for LiDAR Semantic Segmentation
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2023
- [28] Kanghee Lee, Junha Lee, and **Jaesik Park**
Learning to Register Unbalanced Point Pairs
3D Vision and Robotics **CVPR workshop**, 2023
- [29] Jinoh Cho, Minguk Kang, Vibhav Vineet, and **Jaesik Park**
Instance-Aware Image Completion
AI for Content Creation (AI4CC) **CVPR workshop**, 2023
- [30] Rongrong Gao, Tian-Zhu Xiang, Chenyang Lei, **Jaesik Park**, and Qifeng Chen
Scene-level Point Cloud Colorization with Semantic-and-Geometric-aware Networks
IEEE Int. Conf. on Robotics and Automation (**ICRA**), 2023
- [31] Seungjoo Shin*, Min Woo Kim*, Kyong Hwan Jin, Kwang Moo Yi, Yoshiki Kohmura, Tetsuya Ishikawa, Jung Ho Je, and **Jaesik Park**
Deep 3D Reconstruction of Synchrotron X-ray Computed Tomography for Intact Lungs
published by Nature Research (**Scientific Reports**), 2023
(*Equal contribution)
- [32] Seokjun Ahn, Jungtaek Kim, Minsu Cho, and **Jaesik Park**
Sequential Brick Assembly with Efficient Constraint Satisfaction
2210.01021 (arXiv), 2022
- [33] Hyomin Kim, Hyeonseo Nam, Jungeon Kim, **Jaesik Park**, and Seungyong Lee
LaplacianFusion: Detailed 3D Clothed-Human Body Reconstruction
ACM Special Interest Group on Graphics and Interactive Techniques (**SIGGRAPH Asia**), 2022
(Accepted as a journal track paper)
- [34] Yoonwoo Jeong*, Seungjoo Shin*, Junha Lee*, Christopher Choy, Animashree Anandkumar, Minsu Cho, and **Jaesik Park**
PeRFception: Perception using Radiance Fields
Int. Conf. on Neural Information Processing Systems (**NeurIPS**) Datasets and Benchmarks Track, 2022
(*Equal contribution)
- [35] Nayeong Kim, Sehyun Hwang, Sungsoo Ahn, **Jaesik Park**, and Suha Kwak
Learning Debaised Classifier with Biased Committee
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2022

- [36] Seunghyuk Cho, Juyong Lee, **Jaesik Park**, and Dongwoo Kim
A Rotated Hyperbolic Wrapped Normal Distribution for Hierarchical Representation Learning
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2022
- [37] Seungwook Kim, Yoonwoo Jeong, Chunghyun Park, **Jaesik Park**, and Minsu Cho
SeLCA: Self-Supervised Learning of Canonical Axis
Symmetry and Geometry in Neural Representations (NeurReps), **NeurIPS workshop**, 2022
- [38] Jiye Kim, Seungbeom Lee, Dongwoo Kim, Sungsoo Ahn, and **Jaesik Park**
Substructure-Atom Cross Attention for Molecular Representation Learning
AI for Science: Progress and Promises (AI4Science) **NeurIPS workshop**, 2022
- [39] Juyong Lee*, Seokjun Ahn*, and **Jaesik Park**
Style-Agnostic Reinforcement Learning
European Conf. on Computer Vision (**ECCV**), 2022
(*Equal contribution)
- [40] Jaesung Choe*, Chunghyun Park*, Francois Rameau, **Jaesik Park**, and In So Kweon
PointMixer: MLP-Mixer for Point Cloud Understanding
European Conf. on Computer Vision (**ECCV**), 2022
(*Equal contribution)
- [41] Jaewon Kam, Jungeon Kim, Soongjin Kim, **Jaesik Park**, and Seungyong Lee
CostDCNet: Cost Volume based Depth Completion for a Single RGB-D Image
European Conf. on Computer Vision (**ECCV**), 2022
- [42] Jinhwi Lee, Jungtaek Kim, Hyunsoo Chung, **Jaesik Park**, and Minsu Cho
Learning to Assemble Geometric Shapes
Int. Joint Conf. on Artificial Intelligence (**IJCAI**), 2022
- [43] Hyunmin Lee and **Jaesik Park**
Instance-wise Occlusion and Depth Orders in Natural Scenes
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2022
- [44] Chunghyun Park, Yoonwoo Jeong, Minsu Cho, and **Jaesik Park**
Fast Point Transformer
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2022
- [45] Jaebong Jeong, Janghun Jo, Sunghyun Cho, and **Jaesik Park**
3D Scene Painting via Semantic Image Synthesis
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2022
- [46] Jungeon Kim, Hyomin Kim, Hyeonseo Nam, **Jaesik Park**, and Seungyong Lee
TextureMe: High-quality Textured Scene Reconstruction in Real-time
ACM Transactions on Graphics (**ToG**), 2022
(also presented at **SIGGRAPH2022**)
- [47] Jaesung Choe, Byeongin Joung, Francois Rameau, **Jaesik Park**, and In So Kweon
Deep Point Cloud Reconstruction
Int. Conf. on Learning Representations (**ICLR**), 2022
- [48] Jae Shin Yoon, Zhixuan Yu, **Jaesik Park**, and Hyun Soo Park
HUMBI: A Large Multiview Dataset of Human Body Expressions and Benchmark Challenge
Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), 2021
- [49] Junha Lee, Christopher Choy, and **Jaesik Park**
Putting 3D Spatially Sparse Networks on a Diet
2112.01316 (arXiv), 2021
- [50] Wei Dong*, Kwonyoung Ryu*, Michael Kaess, and **Jaesik Park**
Revisiting LiDAR Registration and Reconstruction: A Range Image Perspective
2112.02779 (arXiv), 2021
(*Equal contribution)

- [51] Jinsoo Choi, **Jaesik Park**, and In So Kweon
Self-Supervised Real-time Video Stabilization
British Machine Vision Conference (**BMVC**), 2021
- [52] Minguk Kang, Woohyeon Shim, Minsu Cho, and **Jaesik Park**
Rebooting ACGAN: Auxiliary Classifier GANs with Stable Training
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2021
- [53] Hyunsoo Chung, Jungtaek Kim, Boris Knyazev, Jinhwi Lee, Graham W. Taylor, **Jaesik Park**, and Minsu Cho
Brick-by-Brick: Combinatorial Construction with Deep Reinforcement Learning
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2021
- [54] Yoonwoo Jeong, Seokjun Ahn, Christopher Choy, Animashree Anandkumar, Minsu Cho, and **Jaesik Park**
Self-Calibrating Neural Radiance Fields
Int. Conf. on Computer Vision (**ICCV**), 2021
- [55] Junha Lee, Seungwook Kim, Minsu Cho, and **Jaesik Park**
Deep Hough Voting for Robust Global Registration
Int. Conf. on Computer Vision (**ICCV**), 2021
- [56] Hyomin Kim, Jungeon Kim, Jaewon Kam, **Jaesik Park***, and Seungyong Lee*
Deep Virtual Markers for Articulated 3D Shapes
Int. Conf. on Computer Vision (**ICCV**), 2021
(*Joint corresponding authors, **Oral** Presentation, 3.4% acceptance rate)
- [57] Hyunmin Lee and **Jaesik Park**
STAD: Stable Video Depth Estimation
IEEE Int. Conf. on Image Processing (**ICIP**), 2021
- [58] Taewon Jin, Taesoo Park, Ina Park, **Jaesik Park***, and Ji Hoon Shim*
Accelerated Crystal Structure Prediction of Multi-elements Random Alloy using Expandable Features
published by Nature Research (**Scientific Reports**), 2021
(*Joint corresponding authors)
- [59] Hyomin Kim, Jungeon Kim, Hyeonseo Nam, **Jaesik Park**, and Seungyong Lee
Spatiotemporal Texture Reconstruction for Dynamic Objects Using a Single RGB-D Camera
42nd Annual Conference of the European Association for Computer Graphics (**EuroGraphics**), 2021
- [60] Jinsoo Choi, **Jaesik Park**, and In So Kweon
High-quality Frame Interpolation via Tridirectional Inference
Winter Conf. on Applications of Computer Vision (**WACV**), 2021
- [61] Minguk Kang and **Jaesik Park**
ContraGAN: Contrastive Learning for Conditional Image Generation
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2020
- [62] Jungtaek Kim, Hyunsoo Chung, Minsu Cho, and **Jaesik Park**
Combinatorial 3D Shape Generation via Sequential Assembly
Machine Learning for Engineering Modeling, Simulation, and Design (ML4Eng), **NeurIPS workshop**, 2020
- [63] Jinhwi Lee*, Jungtaek Kim*, Hyunsoo Chung, **Jaesik Park**, and Minsu Cho
Fragment Relation Networks for Geometric Shape Assembly
Learning Meets Combinatorial Algorithms (LMCA), **NeurIPS workshop**, 2020
(*Equal contribution)
- [64] Zhixuan Yu, Jaeshin Yoon, Inkyu Lee, Prashanth Venkatesh, **Jaesik Park**, Jihun Yu, and Hyunsoo Park
HUMBI: A Large Multiview Dataset of Human Body Expressions
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2020
- [65] Christopher Choy, Junha Lee, Rene Ranftl, **Jaesik Park**, and Vladlen Koltun
High-Dimensional Convolutional Networks for Geometric Pattern Recognition
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2020
(**Oral** Presentation, 5.7% acceptance rate)

- [66] Yue Wu, Rongrong Gao, **Jaesik Park**, and Qifeng Chen
Future Video Synthesis with Object Motion Predictions
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2020
- [67] Christopher Choy*, **Jaesik Park***, and Vladlen Koltun
Fully Convolutional Geometric Features
Int. Conf. on Computer Vision (**ICCV**), 2019
(*Equal contribution)
- [68] Jungeon Kim, Hyomin Kim, **Jaesik Park**, and Seungyong Lee
Global Texture Mapping for Dynamic Objects
Pacific Graphics (**PG**), 2019
- [69] Wei Dong, **Jaesik Park**, Yi Yang, and Michael Kaess
GPU Accelerated Robust Scene Reconstruction
IEEE/RSJ Int. Conf. on Intelligent Robots and Systems (**IROS**), 2019
- [70] Hae-Gon Jeon, **Jaesik Park**, Gyeongmin Choe, Jinsun Park, Yunsu Bok, Yu-Wing Tai, and In So Kweon
Depth from a Light Field Image with Learning-based Matching Costs
IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), 2019
- [71] Maxim Tatarchenko*, **Jaesik Park***, Vladlen Koltun, and Qian-Yi Zhou
Tangent Convolutions for Dense Prediction in 3D
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2018
(*Equal contribution. **Spotlight Oral** Presentation)
- [72] Qian-Yi Zhou, **Jaesik Park**, and Vladlen Koltun
Open3D: A Modern Library For 3D Data Processing
1801.09847 (arXiv), 2018
- [73] Byungtae Ahn, Dong-Geol Choi, **Jaesik Park**, and In So Kweon
Real-time Head Pose Estimation using Multi-task Deep Neural Network
Robotics and Autonomous Systems (**RAS**), 2018
- [74] **Jaesik Park**, Qian-Yi Zhou, and Vladlen Koltun
Colored Point Cloud Registration Revisited
Int. Conf. on Computer Vision (**ICCV**), 2017
- [75] Arno Knapitsch, **Jaesik Park**, Qian-Yi Zhou, and Vladlen Koltun
Tanks and Temples: Benchmarking Large-Scale Scene Reconstruction
ACM Special Interest Group on Graphics and Interactive Techniques (**SIGGRAPH**), 2017
- [76] Gyeongmin Choe, **Jaesik Park**, Yu-Wing Tai, and In So Kweon
Refining Geometry from Depth Sensors using IR Shading Images
International Journal of Computer Vision (**IJCV**), 2017
- [77] 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
- [78] **Jaesik Park**, Sudipta N. Sinha, Yasuyuki Matsushita, Yu-Wing Tai, and In So Kweon
Robust Multiview Photometric Stereo using Planar Mesh Parameterization
IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), 2016
- [79] Qian-Yi Zhou, **Jaesik Park**, and Vladlen Koltun
Fast Global Registration
European Conf. on Computer Vision (**ECCV**), 2016
(**Oral** Presentation, 1.8% acceptance rate)
- [80] **Jaesik Park**, Yu-Wing Tai, Sudipta N. Sinha, and In So Kweon
Efficient and Robust Color Consistency for Community Photo Collections
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2016

- [81] Hyowon Ha, Sunghoon Im, **Jaesik Park**, Hae-Gon Jeon, and In So Kweon
High-quality Depth from Uncalibrated Small Motion Clip
 Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2016
 (Oral Presentation, 3.9% acceptance rate)
- [82] 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+
 IEEE Int. Conf. on Robotics and Automation (**ICRA**), 2016
 (Depth processing algorithm of Team KAIST (winner of DARPA robotics challenge finals 2015))
- [83] Seong-Heum Kim, Yu-Wing Tai, **Jaesik Park**, and In So Kweon
Multi-view Object Extraction with Fractional Boundaries
 IEEE Transaction on Image Processing (**TIP**), 2016
- [84] Hyowon Ha, **Jaesik Park**, and In So Kweon
Dense Depth and Albedo from a Single-shot Structured Light
 Int. Conf. on 3D Vision (**3DV**), 2015
- [85] Hae-Gon Jeon, **Jaesik Park**, Gyeongmin Choe, Jinsun Park, Yunsu Bok, Yu-Wing Tai, and In So Kweon
Accurate Depth Map Estimation from a Lenslet Light Field Camera
 Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2015
- [86] SoonMin Hwang, **Jaesik Park**, Namil Kim, Yukyung Choi, and In So Kweon
Multi-modal Pedestrian Detection: Benchmark Dataset and Baselines
 Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2015
- [87] **Jaesik Park**, Hyeongwoo Kim, Yu-Wing Tai, Michael S. Brown, and In-So Kweon
High Quality Depth Map Upsampling and Completion for RGB-D Cameras
 IEEE Transaction on Image Processing (**TIP**), 2014
- [88] Byungtae Ahn, **Jaesik Park**, and In So Kweon
Real-time Head Orientation from a Monocular Camera using Deep Neural Network
 Asian Conf. on Computer Vision (**ACCV**), 2014
- [89] Jinsoo Choi, Byungtae Ahn, **Jaesik Park**, and In So Kweon
GMM-based Saliency Aggregation for Calibration-free Gaze Estimation
 Int. Conf. on Image Processing (**ICIP**), 2014
- [90] Gyeongmin Choe*, **Jaesik Park***, Yu-Wing Tai, and In So Kweon
Exploiting Shading Cues in Kinect IR Images for Geometry Refinement
 Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2014
 (*Equal contributions. Received 20th **HumanTech Paper Award (Silver Prize)**, Samsung Electronics Corp.)
- [91] **Jaesik Park**, Sudipta N. Sinha, Yasuyuki Matsushita, Yu-Wing Tai, and In So Kweon
Calibrating a Non-isotropic Near Point Light Source using a Plane
 Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2014
- [92] **Jaesik Park**, Sudipta N. Sinha, Yasuyuki Matsushita, Yu-Wing Tai, and In So Kweon
Multiview Photometric Stereo using Planar Mesh Parameterization
 Int. Conf. on Computer Vision (**ICCV**), 2013
 (Received 19th **HumanTech Paper Award (Silver Prize)**, Samsung Electronics Corp.)
- [93] **Jaesik Park**, Tae Hyun Oh, Jiyoung Jung, Yu-Wing Tai, and In So Kweon
Tensor Voting Approach for Multi-View 3D Scene-flow Estimation and Refinement
 European Conf. on Computer Vision (**ECCV**), 2012
- [94] **Jaesik Park**, Joon-Young Lee, Yu-Wing Tai, and In So Kweon
Modeling Photo Composition and Its Application to Photo Re-arrangement
 Int. Conf. on Image Processing (**ICIP**), 2012
- [95] **Jaesik Park**, Yu-Wing Tai, and In-So Kweon
Identigram/Watermark removal using cross-channel correlation
 Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2012

- [96] Jiyoung Jung, Yekeun Jeong, **Jaesik Park**, Hyowon Ha, James Dokyoon Kim, and In-So Kweon
A Novel 2.5D Pattern for Extrinsic Calibration of ToF and Camera Fusion System
IEEE/RSJ Int. Conf. on Intelligent Robots and Systems (**IROS**), 2011
- [97] **Jaesik Park***, Hyeongwoo Kim*, Yu-Wing Tai, Michael S. Brown, and In-So Kweon
High Quality Depth Map Upsampling for 3D-TOF Cameras
Int. Conf. on Computer Vision (**ICCV**), 2011
(*Equal contributions)

Domestic

- [1] Sang Min Kim, Seunguk Do, and **Jaesik Park**, *엔터테인먼트 영상의 시공간적 복원*, 제 37회 영상처리 및 이해에 관한 워크샵 (IPIU) (received encouragement award), Feb. 2025
- [2] Namtae Kim, HyunJoon Lee, Haebeom Jung, and **Jaesik Park**, *정렬되지 않은 이미지 쌍을 이용한 2D 가우시안 스플래팅*, 제 37회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2025
- [3] Joonghyuk Shin, Alchan Hwang, Yujin Lee, Daneul Kim, and **Jaesik Park**, *멀티모달 디퓨전 트랜스포머를 활용한 텍스트 조건 기반 정밀 이미지 편집 기법*, 제 37회 영상처리 및 이해에 관한 워크샵 (IPIU) (received poster award), Feb. 2025
- [4] HyunJoon Lee, Junkyu Min, and **Jaesik Park**, *3차원 가우시안 스플래팅을 활용한 미지의 다중 객체 정합*, 제 37회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2025
- [5] Jaeah Lee, Changwoon Choi, Youngmin Kim, and **Jaesik Park**, *움직임의 추상화를 위한 3차원 스케치 재건*, 제 37회 영상처리 및 이해에 관한 워크샵 (IPIU) (received poster award), Feb. 2025
- [6] Cheolhong Min, HyunJoon Lee, Meikel Kokowski, Dahoon Kim, and **Jaesik Park**, *효율적인 다중 작업 실행 평가를 위한 시간 제약 지시 수행 벤치마크*, 제 37회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2025
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- [8] In-Jae Lee, Moonkyum Kim, Kwonyoung Ryu, and **Jaesik Park**, *열린 어휘집합 기반 3차원 객체 검출을 위한 자동 라벨링 기술 개발*, 제 37회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2025
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PROGRAM COMMITTEE

- **Area Chair**, Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2025
- **Area Chair**, Int. Conf. on Machine Learning (**ICML**), 2025
- **Area Chair**, Int. Conf. on Computer Vision (**ICCV**), 2025
- **Action Editor**, Transactions on Machine Learning Research (**TMLR**), 2025
- **Lead Area Chair**, Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2025
- **Area Chair**, Int. Conf. on Learning Representations (**ICLR**), 2025
- **Area Chair**, Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2024
- **Lead Area Chair**, European Conf. on Computer Vision (**ECCV**), 2024
- **Associate Editor**, Int. Conf. on Robotics and Automation (**ICRA**), 2024

- **Area Chair**, Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2024
- **Technical Papers Committee**, ACM (**SIGGRAPH Asia**), 2023
- **Area Chair**, Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2023
- **Area Chair**, Int. Conf. on Computer Vision (**ICCV**), 2023
- **Associate Editor**, Int. Conf. on Robotics and Automation (**ICRA**), 2023
- **Area Chair**, Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2023
- **Area Chair**, European Conf. on Computer Vision (**ECCV**), 2022
- **Associate Editor**, IEEE Int. Conf. on Robotics and Automation (**ICRA**), 2022
- **Associate Editor**, IEEE/RSJ Int. Conf. on Intelligent Robots and Systems (**IROS**), 2021
- Area Chair, Machine Vision Applications (MVA) conference, 2021
- **Area Chair**, Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2021
- **Area Chair**, Int. Conf. on Computer Vision (**ICCV**), 2021
- Senior Program Committee, Int. Joint Conf. on Artificial Intelligence (**IJCAI**), 2021
- Senior Program Committee, Assoc. for the Advancement of Artificial Intelligence (**AAAI**), 2021
- **Area Chair**, Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2020
- Senior Program Committee, Int. Joint Conf. on Artificial Intelligence (**IJCAI**), 2020
- **Area Chair**, Int. Conf. on Computer Vision (**ICCV**), 2019
- **Session Chair**, Int. Conf. on Computer Vision (**ICCV**), 2019
- Have been served as a reviewer for international conferences, such as **CVPR**, **ICCV**, **ECCV**, **ICLR**, **NeurIPS**, **AAAI**, **ICRA**, **IROS**, **SIGGRAPH**, **SIGGRAPH Asia**, **BMVC**, **3DV**, **ACCV**, **WACV**, and so on.
- Have been served as a reviewer for international journals, such as **TPAMI**, **TIP**, **TVCG**, **TRO**, **IJCV**, **CVIU**, **SPL**, **IVC**, **Neurocomputing**, and so on.

AWARDS

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- **Representative ICT RnD Projects** in Recent Five Years (ICT RnD 사업 성과 중 우수과제), IITP (정보통신기획평가원), Republic of Korea, May 2022
- **CSE Young Scholar**, POSTECH Computer Science Engineering Department, Apr. 2022
- **Google Cloud Platform Credit Award**, Google LLC, USA, March 2022
- **28th HumanTech Paper Award (Silver Prize)**, Samsung Electronics Corp., Feb. 2022
- **Best EduTech Class Award**, POSTECH, *Awarded to the one online class among 480 classes*, Nov. 2021
- **Representative Research Achievements**, POSTECH, July 2021
- **Qualcomm Gift Grant**, Qualcomm Corporation, Dec. 2020
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- **Outstanding Online Class**, Awarded to five classes among 170 classes, POSTECH, July 2020
- **Faculty Support Program**, Intel Corporation, June 2020
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- **Qualcomm Gift Grant**, Qualcomm Corporation, Sep. 2019
- **Research Velocity Challenge Award**, Intel Corporation, Dec. 2018
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- Excellent Intern Award, Microsoft Research Asia, Dec. 2012
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- **Summa Cum Laude**, Hanyang University, *GPA 4.31/4.5*, Feb. 2009
- **Full Scholarship**, Jeong-Su Scholarship Foundation, Aug. 2006
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- 대조 학습과 적대적 생성 신경망을 활용한 이미지 생성 및 편집 방법과 장치, Patent No. 10-2021-0076556, Republic of Korea (Application granted)
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- 영상기반 3차원 복원과 AI 응용, 한국인공지능학회 인공지능 동계 단기강좌, Seoul, Republic of Korea, Feb. 2025
- 제한된 관측으로부터 3차원 복원하기, IEIE 영상이해연구회 겨울학교, Hongchun, Republic of Korea, Jan. 2025
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- *Radiance Field Reconstruction*, **KIA** motor company, Gwangmyeong, Republic of Korea, Aug. 2024
- *Radiance Field Reconstruction*, Koh Young Technology, Yongin, Republic of Korea, Aug. 2024
- 가우시안 스피래팅 기법의 발전 현황, 공간컴퓨팅을 위한 지능형 XR 기술 및 응용 워크숍, Seoul, RoK, July 2024
- *Recent Trends in Radiance Field Reconstruction Methods*, 한국컴퓨터그래픽스학회, Gyeongju, Republic of Korea, July 2024
- *3D Scene Understanding*, 삼성전자 DS사업부 특강, Seoul, Republic of Korea, June 2024
- *3D Scene Reconstruction, Representation, and Understanding*, KAIST 초세대연구실 개소 기념 특별 심포지엄, Daejeon, Republic of Korea, Feb. 2024
- *Topics in 3D vision integrating AI modules*, **Hyundai Motor Group**, Virtual, Oct. 2023
- *Learning to Understand 3D Point Clouds*, 2023 Fall Workshop on Algorithms and Computation, **POSTECH**, Pohang, Republic of Korea, Oct. 2023
- *Towards NeRF at Scale*, Computing Frontier Summer School, **Seoul Nat. Univ.**, Republic of Korea, Aug. 2023
- *Storage Efficient Radiance Fields*, **ETRI**, Daejeon, Republic of Korea, July 2023
- *Social Speed Mentoring*, **CVPR 2023**, Vancouver, Canada, June 2023

- *Generative AI가 산업에 미치는 영향과 성장 전략 (패널)*, AI혁신허브콜로키엄, Jeju, Republic of Korea, May 2023
- *NeRF의 최신 기술 동향, 춘계 방송과 미디어 기술 워크숍*, Seoul, Republic of Korea, May 2023
- *컴퓨터 비전을 위한 딥러닝 프로그래밍*, 사단법인 한국컴퓨터비전학회, Online Lecture, Feb. 2023
- *전자공학회 영상이해 연구회 겨울학교*, 대한전자공학회, Hoengseong, Republic of Korea, Jan. 2023
- *3D Vision and Open3D*, **Seoul National University**, Seoul, Republic of Korea (offline+online), Oct. 2022
- *Object Detection from Images or Point Clouds*, **LG Electronics**, Seoul (online), Republic of Korea, Aug. 2022
- *Fast Point Transformer*, **Harvard University**, Boston, MA, USA (online), June 2022
- *Self-Calibrating Neural Radiance Fields*, **Seoul National University**, Seoul, Republic of Korea (online), Feb. 2022
- *Self-Calibrating Neural Radiance Fields*, **DGIST**, Daegu, Republic of Korea (online), Aug. 2021
- *Object Detection from Images or Point Clouds*, **LG Electronics**, Seoul, Republic of Korea, Aug. 2021
- *Self-Calibrating Neural Radiance Fields*, Korea Institute of Science and Technology (**KIST**), Virtual, June 2021
- *Mentor Session: How to Become a Professor*, **CVPR 2021**, Virtual, June 2021
- *Recent Work on Image Generation*, **GIST**, Gwangju, Republic of Korea (online), May 2021
- *Point Cloud Registration using Hierarchical Hough Transform*, 33rd Workshop on Image Processing and Image Understanding (**IPIU 2021**), Virtual, Feb. 2021
- *3D Representations and Detections*, Chungbuk University, Virtual, Jan. 2021
- *Introduction to Computer Vision*, **Kyungbuk Science High School**, Pohang, Republic of Korea, Aug. 2020
- *High-Dimensional Convolutional Networks for Geometric Pattern Recognition*, **KCCV 2020**, Seoul, Aug. 2020
- *Object Detection from Images or Point Clouds*, **LG Electronics**, Seoul, Republic of Korea, Aug. 2020
- *Geometric Pattern Recognition*, 32nd Workshop on Image Proc. and Image Understanding (**IPIU 2020**), Feb. 2020
- *Fully Convolutional Geometric Features*, Koh Young Technology, Yongin, Republic of Korea, Dec. 2019
- *Open3D Tutorial and Fully Convolutional Geometric Features*, **KETI**, Seongnam, Republic of Korea, Nov. 2019
- *Introduction to Computer Vision and Deep Learning*, **Daegu Science High School**, Aug. 2019
- *3D Computer Vision and Open3D*, Int. Conf. on Machine Vision Applications (**MVA**), Tokyo, Japan, May 2019
- *3D Computer Vision and Open3D*, **Qualcomm**, San Diego, USA, June 2019
- *3D reconstruction using Open3D*, Minneapolis, **University of Minnesota**, invited lecture for Multiview 3D Geometry in Computer Vision (CSCI 5980) Class, Apr. 2018
- *3D reconstruction using Open3D*, **Forma Technology** (acquired by **Snap Inc.**), San Francisco, USA, March 2018

OTHER WORKING EXPERIENCES

Post-Doc. Researcher KAIST (Mentor: Prof. In So Kweon)	Daejeon, Republic of Korea Aug. 2015 – Nov. 2015
Research Intern Microsoft Research (MSR) (Mentor: Dr. Sudipta N. Sinha)	Redmond, WA, USA June 2013 – Sep. 2013
Research Intern Microsoft Research Asia (MSRA) (Mentor: Prof. Y. Matsushita)	Beijing, China April 2012 – Oct. 2012

REFERENCE

- Up on request.