

# Jaesik Park

jaesik.park@snu.ac.kr | jaesik.info | [Google Scholar](#)  
653 Ho, 303 Dong, 1 Gwanak-ro, Gwanak-gu, Seoul, Republic of Korea (08826)

## WORKING EXPERIENCES

---

### Associate Professor

*CSE and IPAI, Seoul National University (SNU)*

Seoul, Republic of Korea

2025.09 – Present

- Principal Investigator of Visual and Geometric Intelligence Lab.
- Chief Professor of Student Affairs, IPAI (2024.09 – Present)
- Associate Director, Haedong Advanced Engineering Center (2025.05 – 2026.05)

### Assistant Professor

*CSE and IPAI, Seoul National University (SNU)*

Seoul, Republic of Korea

2023.09 – 2025.08

### Associate Professor

*CSE and GSAI, Pohang University of Science and Technology (POSTECH)*

Pohang, Republic of Korea

2022.09 – 2023.08

- Advised about 20 masters and Ph.D. students
- Selected as one of the POSTECH's Representative Research Achievements (2021)
- Received Outstanding Online Class Award (2020) and the Best EduTech Award (2021)

### Assistant Professor

*CSE and GSAI, Pohang University of Science and Technology (POSTECH)*

Pohang, Republic of Korea

2019.04 – 2022.08

### Staff Research Scientist

*Intelligent Systems Lab, Intel (Manager: Dr. Vladlen Koltun)*

Santa Clara, CA, USA

2015.12 – 2019.03

- Advised intern students from Stanford University, U.C. Berkeley, and Carnegie Mellon University
- **Co-creator of Open3D**: open-sourced 3D vision library built from scratch (**11.5+1.9k GitHub stars**)

## EDUCATION

---

### Ph.D. and M.S. in Electrical Eng.

*Korea Advanced Institute of Science and Technology (KAIST)*

Daejeon, Republic of Korea

2009.02 – 2011.02 & 2011.02 – 2015.08

- 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)

### B.E. in Media Communication Eng.

*Hanyang University (*Summa cum laude*)*

Seoul, Republic of Korea

2005.03 – 2009.02

## PUBLICATIONS

---

### International

- [1] Seunguk Do, Minwoo Huh, Joonghyuk Shin, and **Jaesik Park**  
*Direct Reward Fine-Tuning on Poses for Single Image to 3D Human in the Wild*  
Int. Conf. on Learning Representations (**ICLR**), 2026
- [2] Sanghyun Jo, Ziseok Lee, Wooyeol Lee, Jonghyun Choi, **Jaesik Park**, and Kyungsu Kim  
*TRACE: Your Diffusion Model is Secretly an Instance Edge Detector*  
Int. Conf. on Learning Representations (**ICLR**), 2026
- [3] Joonghyuk Shin, Zhengqi Li, Richard Zhang, Jun-Yan Zhu, **Jaesik Park**, Eli Schechtman, and Xun Huang  
*MotionStream: Real-Time Video Generation with Interactive Motion Controls*  
Int. Conf. on Learning Representations (**ICLR**), 2026
- [4] Haebeom Jung, Namtae Kim, Jungwoo Kim, and **Jaesik Park**  
*Targetless LiDAR-Camera Calibration with Neural Gaussian Splatting*  
IEEE Robotics and Automation Letters (**RAL**), 2026  
(Invited for an **oral** presentation at **ICRA 2026**)

- [5] Hyungtae Lim\*, Minkyun Seo\*, Luca Carlone, and **Jaesik Park**  
*Towards Zero-Shot Point Cloud Registration Across Diverse Scales, Scenes, and Sensor Setups*  
2601.02759 (arXiv), 2026  
(\*Equal contribution)
- [6] Deepak Ghimire, Dayoung Kil, Seonghwan Jeong, **Jaesik Park**, and Seong-Heum Kim  
*One-Cycle Structured Pruning via Stability-Driven Subnetwork Search*  
Winter Conf. on Applications of Computer Vision (**WACV**), 2026
- [7] Seunghun Oh, Jaesung Choe, Dongjae Lee, Daeun Lee, Seunghoon Jeong, Yu-Chiang Frank Wang, and **Jaesik Park**  
*SVRecon: Sparse Voxel Rasterization for Surface Reconstruction*  
2511.17364 (arXiv), 2025
- [8] Minseo Lee, Byeonghyeon Lee, Lucas Yunkyu Lee, Eunsoo Lee, Sangmin Kim, Seunghyeon Song, Joo Chan Lee, Jong Hwan Ko, **Jaesik Park**, and Eunbyung Park  
*Optimized Minimal 4D Gaussian Splatting*  
2510.03857 (arXiv), 2025
- [9] In-Jae Lee, Mungyeom Kim, Kwonyoung Ryu, Pierre Musacchio, and **Jaesik Park**  
*OpenBox: Annotate Any Bounding Boxes in 3D*  
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2025  
(Accepted as a **spotlight** paper)
- [10] Hyeonseong Jeon, Cheolhong Min, and **Jaesik Park**  
*Tree-Guided Diffusion Planner*  
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2025
- [11] Pierre Musacchio, Hyunmin Lee, and **Jaesik Park**  
*Holistic Order Prediction in Natural Scenes*  
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2025
- [12] Hyunjin Kim, Haebeom Jung, and **Jaesik Park**  
*Metropolis-Hastings Sampling for 3D Gaussian Reconstruction*  
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2025
- [13] Mingi Kwon\*, Joonghyuk Shin\*, Jaeseok Jung, **Jaesik Park**†, and Youngjung Uh†  
*JAM-Flow: Joint Audio-Motion Synthesis with Flow Matching*  
2506.23552 (arXiv), 2025  
(\*Equal Contribution, †Equal Advising)
- [14] Minkyun Seo\*, Hyungtae Lim\*, Kanghee Lee, Luca Carlone, and **Jaesik Park**  
*BUFFER-X: Towards Zero-Shot Point Cloud Registration in Diverse Scenes*  
Int. Conf. on Computer Vision (**ICCV**), 2025  
(Accepted as a **highlight paper**, \*Joint first authors)
- [15] Hyunjoon Lee, Joonkyu Min, and **Jaesik Park**  
*CF3: Compact and Fast 3D Feature Fields*  
Int. Conf. on Computer Vision (**ICCV**), 2025  
(Also accepted at **ICCV 2025 demonstrations track**)
- [16] Joonghyuk Shin, Alchan Hwang, Yujin Kim, Daneul Kim, and **Jaesik Park**  
*Exploring Multimodal Diffusion Transformers for Enhanced Prompt-based Image Editing*  
Int. Conf. on Computer Vision (**ICCV**), 2025
- [17] Seungjoo Shin, **Jaesik Park**, and Sunghyun Cho  
*Leveraging Learned Image Prior for 3D Gaussian Compression*  
Workshop on Efficient Computing under Limited Resources (ECLR) **ICCV workshop**, 2025
- [18] Daneul Kim, Jingxu Zhang, Wonjoon Jin, Sunghyun Cho, Qi Dai, **Jaesik Park**, and Chong Luo  
*Subject-driven Video Generation via Disentangled Identity and Motion*  
2504.17816 (arXiv), 2025

- [19] Sangmin Kim, Seunguk Do, and **Jaesik Park**  
*ShowMak3r: Compositional TV Show Reconstruction*  
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2025
- [20] 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
- [21] 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
- [22] 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
- [23] Seungjoo Shin, **Jaesik Park**, and Sunghyun Cho  
*Locality-aware Gaussian Compression for Fast and High-quality Rendering*  
Int. Conf. on Learning Representations (**ICLR**), 2025
- [24] Ashish Kumar and **Jaesik Park**  
*Designing Concise ConvNets with Columnar Stages*  
Int. Conf. on Learning Representations (**ICLR**), 2025
- [25] Ashish Kumar and **Jaesik Park**  
*Cross Resolution Encoding-Decoding For Detection Transformers*  
2410.04088 (arXiv), 2024
- [26] 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)
- [27] 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
- [28] 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
- [29] 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
- [30] 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
- [31] 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)
- [32] 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
- [33] 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

- [34] 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
- [35] 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 for an **oral** presentation at **ICRA 2024**)
- [36] 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.)
- [37] 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
- [38] 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
- [39] Joonghyuk Shin, Minguk Kang, and **Jaesik Park**  
*Fill-Up: Balancing Long-Tailed Data with Generative Models*  
2306.07200 (arXiv), 2023
- [40] Seoyeon Kim, Minguk Kang, and **Jaesik Park**  
*RISCLIP: Referring Image Segmentation Framework using CLIP*  
2306.08498 (arXiv), 2023
- [41] 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
- [42] 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)
- [43] Kwonyoung Ryu, Soonmin Hwang, and **Jaesik Park**  
*Instant Domain Augmentation for LiDAR Semantic Segmentation*  
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2023
- [44] Kanghee Lee, Junha Lee, and **Jaesik Park**  
*Learning to Register Unbalanced Point Pairs*  
3D Vision and Robotics **CVPR workshop**, 2023
- [45] Jinoh Cho, Minguk Kang, Vibhav Vineet, and **Jaesik Park**  
*Instance-Aware Image Completion*  
AI for Content Creation (AI4CC) **CVPR workshop**, 2023
- [46] 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
- [47] 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)
- [48] Seokjun Ahn, Jungtaek Kim, Minsu Cho, and **Jaesik Park**  
*Sequential Brick Assembly with Efficient Constraint Satisfaction*  
2210.01021 (arXiv), 2022

- [49] 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)
- [50] 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)
- [51] Nayeong Kim, Sehyun Hwang, Sungsoo Ahn, **Jaesik Park**, and Suha Kwak  
*Learning Debiased Classifier with Biased Committee*  
 Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2022
- [52] 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
- [53] 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
- [54] 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
- [55] Juyong Lee\*, Seokjun Ahn\*, and **Jaesik Park**  
*Style-Agnostic Reinforcement Learning*  
 European Conf. on Computer Vision (**ECCV**), 2022  
 (\*Equal contribution)
- [56] 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)
- [57] 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
- [58] Jinhwi Lee, Jungtaek Kim, Hyunsoo Chung, **Jaesik Park**, and Minsu Cho  
*Learning to Assemble Geometric Shapes*  
 Int. Joint Conf. on Artificial Intelligence (**IJCAI**), 2022
- [59] Hyunmin Lee and **Jaesik Park**  
*Instance-wise Occlusion and Depth Orders in Natural Scenes*  
 Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2022
- [60] Chunghyun Park, Yoonwoo Jeong, Minsu Cho, and **Jaesik Park**  
*Fast Point Transformer*  
 Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2022  
 (Received 28th **HumanTech Paper Award (Silver Prize)**, Samsung Electronics Corp.)
- [61] 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
- [62] 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**)

- [63] Jaesung Choe, Byeongin Joung, Francois Rameau, **Jaesik Park**, and In So Kweon  
*Deep Point Cloud Reconstruction*  
Int. Conf. on Learning Representations (**ICLR**), 2022
- [64] 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
- [65] Junha Lee, Christopher Choy, and **Jaesik Park**  
*Putting 3D Spatially Sparse Networks on a Diet*  
2112.01316 (arXiv), 2021
- [66] Wei Dong\*, Kwonyoung Ryu\*, Michael Kaess, and **Jaesik Park**  
*Revisiting LiDAR Registration and Reconstruction: A Range Image Perspective*  
2112.02779 (arXiv), 2021  
(\*Equal contribution)
- [67] Jinsoo Choi, **Jaesik Park**, and In So Kweon  
*Self-Supervised Real-time Video Stabilization*  
British Machine Vision Conference (**BMVC**), 2021
- [68] 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
- [69] 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
- [70] 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
- [71] Junha Lee, Seungwook Kim, Minsu Cho, and **Jaesik Park**  
*Deep Hough Voting for Robust Global Registration*  
Int. Conf. on Computer Vision (**ICCV**), 2021
- [72] 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)
- [73] Hyunmin Lee and **Jaesik Park**  
*STAD: Stable Video Depth Estimation*  
IEEE Int. Conf. on Image Processing (**ICIP**), 2021
- [74] 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)
- [75] 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
- [76] Jinsoo Choi, **Jaesik Park**, and In So Kweon  
*High-quality Frame Interpolation via Tridirectional Inference*  
Winter Conf. on Applications of Computer Vision (**WACV**), 2021
- [77] Minguk Kang and **Jaesik Park**  
*ContraGAN: Contrastive Learning for Conditional Image Generation*  
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2020

- [78] 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
- [79] 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)
- [80] 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
- [81] 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)
- [82] 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
- [83] Christopher Choy\*, **Jaesik Park\***, and Vladlen Koltun  
*Fully Convolutional Geometric Features*  
Int. Conf. on Computer Vision (**ICCV**), 2019  
(\*Equal contribution)
- [84] Jungeon Kim, Hyomin Kim, **Jaesik Park**, and Seungyong Lee  
*Global Texture Mapping for Dynamic Objects*  
Pacific Graphics (**PG**), 2019
- [85] 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
- [86] 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
- [87] 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**)
- [88] Qian-Yi Zhou, **Jaesik Park**, and Vladlen Koltun  
*Open3D: A Modern Library For 3D Data Processing*  
1801.09847 (arXiv), 2018
- [89] 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
- [90] **Jaesik Park**, Qian-Yi Zhou, and Vladlen Koltun  
*Colored Point Cloud Registration Revisited*  
Int. Conf. on Computer Vision (**ICCV**), 2017
- [91] 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
- [92] 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

- [93] 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
- [94] **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
- [95] Qian-Yi Zhou, **Jaesik Park**, and Vladlen Koltun  
*Fast Global Registration*  
European Conf. on Computer Vision (**ECCV**), 2016  
(**Oral Presentation**, 1.8% acceptance rate)
- [96] **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
- [97] 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)
- [98] 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))
- [99] 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
- [100] 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
- [101] 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
- [102] SoonMin Hwang, **Jaesik Park**, Namil Kim, Yukyung Choi, and In So Kweon  
*Multispectral Pedestrian Detection: Benchmark Dataset and Baselines*  
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2015
- [103] **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
- [104] 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
- [105] 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
- [106] 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.)
- [107] **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

- [108] **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.)
- [109] **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
- [110] **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
- [111] **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
- [112] 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
- [113] **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 스피클래팅*, 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 스피클래팅을 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
- [7] Pierre Musacchio and **Jaesik Park**, *End-to-end Occlusion and Depth Order Prediction with Transformers*, 제 37회 영상처리 및 이해에 관한 워크샵 (IPIU) (received poster award), Feb. 2025
- [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
- [9] Haebeom Jung, Jungwoo Kim, and **Jaesik Park**, *광학 손실을 통한 부정확한 카메라 포즈 최적화*, 제 37회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2025
- [10] Jinmo Kim, Namtae Kim, HyunJoon Lee, and **Jaesik Park**, *가려진 형상의 복원을 위한 Masked Multi-view Transformer*, 제 37회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2025
- [11] Daneul Kim, Jaeah Lee, and **Jaesik Park**, *층위별 메모리를 활용한 이미지 편집 개선 기법*, 제 37회 영상처리 및 이해에 관한 워크샵 (IPIU) (received poster award), Feb. 2025
- [12] Seunguk Do, Joonghyuk Shin, and **Jaesik Park**, *3D 자세 추정 없는 단일 시점 3D 아바타 모양 복원*, 제 37회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2025
- [13] Nahyuk Lee, Juhong Min, Junha Lee, Seungwook Kim, Kanghee Lee, **Jaesik Park**, and Minsu Cho, *3차원 기하학적 조립을 위한 효율적인 점 구름 매칭*, 제 36회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2024

- [14] Joonghyuk Shin, MinGuk Kang, and **Jaesik Park**, 생성모델을 활용한 데이터 불균형 문제의 완화 기법, 제 36회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2024
- [15] Seunguk Do, Gu Lee, and **Jaesik Park**, 비디오로부터 효율적인 래디언스 필드 기반의 사람 아바타 복원, 제 36회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2024
- [16] Kwonyoung Ryu, Jinmo Kim, Soonmin Hwang, and **Jaesik Park**, 다시점 이미지와 회전형 라이다를 활용한 열린 어휘집합의 CLIP 특징점 생성과 3차원 의미론적 물체분할, 제 36회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2024
- [17] Kanghee Lee and **Jaesik Park**, 점 군집 정합을 위한 특이대응점 기반 구조적 매칭 기법, 제 36회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2024
- [18] Dongmin You, Kanghee Lee, and **Jaesik Park**, *Multi-way 3D Registration using a Transformer Network*, 한국인공지능학회 추계학술대회, Nov. 2023
- [19] Jiye Kim, Seungbeom Lee, Dongwoo Kim, Sungsoo Ahn, and **Jaesik Park**, 분자 표현학습을 위한 하부구조 인식 그래프 트랜스포머, 한국멀티미디어학회 추계학술대회, Nov. 2022
- [20] Kanghee Lee, Junha Lee, and **Jaesik Park**, 비균등 점군집 정합을 위한 계층적인 매칭 모듈, 한국멀티미디어학회 추계학술대회, Nov. 2022
- [21] Jinoh Cho, Minguk Kang, and **Jaesik Park**, 맥락에 부합하는 영상 완성 기법, 한국멀티미디어학회 추계학술대회, Nov. 2022
- [22] Seokjun Ahn, Jinwhi Lee, Jungtaek Kim, Suhyeon Jeong, Seungwook Kim, **Jaesik Park**, and Minsu Cho, 탐색 알고리즘을 활용한 순차적 조각 조립, 제 34회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2022
- [23] Jaewon Kam, Jungeon Kim, Soongjin Kim, **Jaesik Park**, and Seungyoung Lee, 실내 깊이 완성을 위한 3D 합성곱 기반의 절두체 합성곱, 제 34회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2022
- [24] Wonjun Jin, Soongjin Kim, **Jaesik Park**, Seungyoung Lee, and Sunghyun Cho, *GC-NeRF*: 형상 제약을 활용한 효율적인 *NeRF* 학습, 제 34회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2022
- [25] Junha Lee, Seungwook Kim, Minsu Cho, and **Jaesik Park**, 계층적 허프 변환을 통한 포인트 클라우드 정합, 제 33회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2021 (**Received The Gold Prize**)
- [26] Hyunmin Lee and **Jaesik Park**, 일관된 비디오 템스 맵 추정을 위한 시간 어텐션 모듈, 제 33회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2021 (**Received The Silver Prize**)
- [27] Hyunsoo Chung, Jungtaek Kim, Jinhwi Lee, **Jaesik Park**, and Minsu Cho, 강화학습을 이용한 그래프 표현 기반의 3차원 물체 생성, 제 33회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2021
- [28] Jungeon Kim, Hyomin Kim, **Jaesik Park**, and Seungyong Lee, 동적 객체에 대한 전역 텍스처 맵 생성, 제 32회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2020
- [29] Jungeon Kim, Hyomin Kim, **Jaesik Park**, and Seungyong Lee, 메시 피라미드를 활용한 3차원 비강체 모델 텍스처 맵 생성, 한국컴퓨터그래픽스학회, July 2019
- [30] Min-Hyun Kim, **Jaesik Park**, and In So Kweon, 깊이 영상 처리를 위한 학습기반 신뢰도 추정 및 재질 분류, 제 27회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2014
- [31] Junsik Kim, Kyungdon Joo, Tae-Hyun Oh, **Jaesik Park**, and In So Kweon, 시야 공유가 없는 다중 카메라를 이용한 사람 추적, 제 27회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2014
- [32] SoonMin Hwang, **Jaesik Park**, Namil Kim, Yukyung Choi, and In So Kweon, 컬러-열영상 퓨전을 통한 강인한 보행자 검출 기법, 제 27회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2014
- [33] Hae-Gon Jeon, **Jaesik Park**, Gyeongmin Choe, Jinsun Park, Yunsu Bok, Yu-Wing Tai, and In So Kweon, 마이크로 렌즈 기반의 휴대용 라이트필드 카메라를 이용한 정확한 깊이 정보 추정방법, 한국멀티미디어학회 춘계학술발표대회, May 2014 (**Received the Best Paper Award**)
- [34] Gyeongmin Choe, **Jaesik Park**, Hyowon Ha, and In So Kweon, 키넥트 깊이 정밀도 개선을 위한 적외선 패턴 영상의 스테레오 정합, 2013년도 한국 멀티미디어 학회 춘계학술 발표대회 논문집 제 16권 1호, May 2013
- [35] **Jaesik Park**, Tae Hyun Oh, Jiyoung Jung, Yu-Wing Tai, and In So Kweon, 다시점 영상기반 3차원 움직임 추정기법, 제 25회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2013
- [36] **Jaesik Park**, Yu-Wing Tai, and In So Kweon, 컬러 영상의 홀로그램 및 워터마크 제거 기법, 제 25회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2013 (**Received the Best Paper Award**)

- Conflict-of-Interest (**CoI**) **Coordinator** for the Technical Papers Program, ACM **SIGGRAPH**, 2026
- **Area Chair**, Int. Conf. on Machine Learning (**ICML**), 2026
- **Associate Editor**, Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), 2026
- **Area Chair**, Int. Conf. on Learning Representations (**ICLR**), 2026
- **Lead Area Chair**, Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2026
- **Publication Chair**, Asian Conference on Computer Vision (**ACCV**), 2026
- Conflict-of-Interest (**CoI**) **Coordinator** for the Technical Papers Program, ACM **SIGGRAPH Asia**, 2025
- **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.

- **Academic Grant Program**, NVIDIA Corp., Sep. 2025
- **Gift Grant**, Microsoft Corp., Sep. 2024
- **30th HumanTech Paper Award (Silver Prize)**, Samsung Electronics Corp., Feb. 2024
- **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
- **The 16th Samsung EM Paper Contest (Silver Prize)**, Samsung Electro-Mechanics, Dec. 2020
- **Outstanding Online Class**, Awarded to five classes among 170 classes, POSTECH, July 2020
- **Faculty Support Program**, Intel Corporation, June 2020
- **Google Season of Docs**, Google Corporation, *Technical writer support for Open3D*, Apr. 2019
- **Qualcomm Gift Grant**, Qualcomm Corporation, Sep. 2019
- **Research Velocity Challenge Award**, Intel Corporation, Dec. 2018
- **Depth Estimation Challenge: Robustness Champion**, CVPR workshop on Light Fields for Comp. Vis., July 2017
- **Qualcomm Innovation Award**, Qualcomm Korea Corp., March 2016
- **CVPR 2015 Doctoral Consortium**, IEEE CVPR, Apr. 2016
- **Honor Prize**, KAIST, *Annual Ph.D. Research Progress Evaluation*, May 2016
- **Best Paper Award**, Korea Multimedia Society, *2015 Spring Annual Conference*, May 2016
- **Honor Prize**, KAIST, *Annual Ph.D. Research Progress Evaluation*, May 2015
- **20th HumanTech Paper Award (Silver Prize)**, Samsung Electronics Corp., Feb. 2014
- **19th HumanTech Paper Award (Silver Prize)**, Samsung Electronics Corp., Feb. 2013
- **Best Paper Award**, 25th Workshop on Image Processing and Image Understanding (IPIU2013), Feb. 2013
- **Bronze Prize**, Samsung Techwin research center conference, Feb. 2012
- **Excellent Intern Award**, Microsoft Research Asia, Dec. 2012
- **Microsoft Research Asia Fellowship**, Microsoft, *Awarded to 11 Ph.D. students in the top Asian universities.*, Nov. 2011
- **Summa Cum Laude**, Hanyang University, *GPA 4.31/4.5*, Feb. 2009
- **Full Scholarship**, Jeong-Su Scholarship Foundation, Aug. 2006
- **Scholarship for Undergraduate Students**, The Korea Foundation for Advanced Studies (KFAS), June 2006
- **Full scholarship**, Hanyang University, Aug. 2005

## PATENTS

---

- 손상된 이미지를 복원하는 방법, 이를 위한 장치, 및 이미지 재구성 방법, Patent No. 10-2024-0101506, Republic of Korea (Application granted)
- 대조 학습과 적대적 생성 신경망을 활용한 이미지 생성 및 편집 방법과 장치, Patent No. 10-2021-0076556, Republic of Korea (Application granted)
- Tangent Convolutions for 3D Data, US10572770B2, (Application granted)
- 깊이 정보 획득 장치 및 깊이 정보 획득 방법 (Depth Map Acquisition Device And Depth Map Acquisition Method), Patent No. 1018520850000, Republic of Korea, (Application granted)
- 삼차원 영상 정보 획득 방법 및 이를 구현한 컴퓨팅 장치 (Method For Acquiring Three Dimensional Image Information, And Computing Device Implementing The Same Method), Patent No. 1017652570000, Republic of Korea (Application granted)
- 전경 추출 방법 및 장치 (Foreground Area Extracting Method and Apparatus), Patent No. 10-2015-0084331, Republic of Korea.
- 다중 객체 추적 방법 및 이를 위한 장치 (Method Of Tracking Multiple Objects And Apparatus For The Same), Patent No. 10-2015-0070569, Republic of Korea
- 깊이 센서와 적외선 음영 영상을 이용한 고품질 3차원 정보 획득 장치 및 방법 (Device and method for obtaining accurate 3D information using depth sensor and infrared shading cues), Patent No. 1017079390000, Republic of Korea. (Application granted)
- 가려짐이 있는 환경에서 이동표적의 위치를 추정하는 방법 (Method for Estimating Location of Moving Target in Occluded Tracking Environment), Patent No. 1012883880000, Republic of Korea. (Application granted)
- 컬러 이미지의 채널간 상관관계를 이용하는 워터마크 제거 방법 (Method for removing watermark using cross-channel correlation of color image), Patent No. 1013952840000, Republic of Korea. (Application granted)

## TEACHING

---

- 4190.428 Introduction to Machine Learning, Spring, 2025
- M2177.008600 Introduction to Artificial Intelligence, Spring, 2025
- M3309.005900 Generative Artificial Intelligence, Fall, 2024
- 4190.407 Algorithm, Spring, 2024
- M2177.008600 Introduction to AI, Spring, 2024
- M3309.001800 Topics in Machine Learning: Basics and Applications on Generative AI, Fall, 2023
- CSED233 Data Structure, Spring, 2023
- AIGS537 Artificial Intelligence Data Science, Spring, 2023
- CSED703F Topics in AI: 3D Vision, Fall, 2022
- AIGS101 Artificial Intelligence Basis II, Fall, 2022
- CSED233 Data Structure, Spring, 2022
- AIGS101 Artificial Intelligence Basis I, Spring, 2022
- AIGS101 Artificial Intelligence Basis II, Fall, 2021
- CSED703F Topics in AI: 3D Vision, Fall, 2021
- AIGS101 Artificial Intelligence Basis I, Spring, 2021
- CSED538/AIGS538 Deep learning, **Awarded as the Best EduTech Class** by POSTECH, Spring, 2021
- AIGS101, Artificial Intelligence Basis II, Fall, 2020
- CSED100, Introduction to Computer Science Engineering, Fall, 2020
- CSED703F, 3D Vision, Fall, 2020

- CSED800/AIGS800, CSE/GSAI Colloquium, Fall, 2020
- AIGS101, Artificial Intelligence Basis I, Spring, 2020
- AIGS537/CSED537, Artificial Intelligence and Data Science Spring, Spring, 2020
- CSED233, Data Structure, **Awarded as the Outstanding Online Class** by POSTECH, Spring, 2020
- CSED703F-01 3D Vision, Fall, 2019

## FUNDING

---

- 지속가능한 생성형 인공지능 플랫폼, 글로벌 기초연구실, IITP, 2024.08-2027.04
- 2024 글로벌 AI 프론티어랩, SW컴퓨팅산업원천기술개발사업, IITP, 2024.08-2026.12
- *Compositional Video Synthesis from 4D layout guidance with LLM*, Microsoft Research Asia, IITP, 2024.05-2025.04
- 단일영상을 활용한 처음 보는 물체의 3차원 모양 복원, Hyundai Motor Group, 2023.09-2024.08
- 라이더 객체 검출 성능 개선을 위한 학습기술 개발, Hyundai Motor Group, 2023.06-2024.05
- 과학기술정보통신부, 실내외 장면을 위한 3차원 복원 및 인식, 중견연구자 지원사업, Ministry of Science and ICT, Republic of Korea, 2023.03-2026.02
- 과학기술정보통신부, 비정형 영상을 활용하는 cm급 오차공간 복원 기술, Ministry of Science and ICT, Republic of Korea, 2023.03-2025.12
- 효율적인 뉴럴 렌더링 모델 개발, Samsung Advanced Institute of Technology, 2022.12-2023.11
- 3D Point Cloud 기반의 환경 인식 기술 개발, LG Electronics, 2022.06-2022.12
- 일상의 다층적 시각상식에 기반한 시공간 이해 및 생성 인공지능 개발, IITP (정보통신기획평가원), Republic of Korea, 2022.04-2023.12
- 3D reconstruction system, Osstem Implant, Republic of Korea, 2022.07-2023.06
- *Discovering Visual Common Sense*, Qualcomm, USA, 2022.03-2023.03
- *High-fidelity 3D Reconstruction*, Intel Corp., USA, 2022.03-2023.03
- *Google Cloud Platform Credit Award*, Google LLC, USA, 2022.03
- 과학기술정보통신부, 인공지능혁신허브 연구개발, Ministry of Science and ICT, Republic of Korea, 2021.09-current
- *High-quality 3D reconstruction*, Osstem Implant, Republic of Korea, 2021.07-2021.12
- 문화체육관광부, 포스텍-한예중 문화기술선도대학원, Ministry of Culture, Sports and Tourism, Republic of Korea, 2021.06-2023.12
- *Camera localization*, Samsung Electronics Corp., 2021.05-2022.05
- 과학기술정보통신부, 시각적 상식에 기반한 영상 인페인팅, Ministry of Science and ICT, Republic of Korea, 2021.05-2024.05
- *LiDAR data augmentation*, Hyundai Motor Group, 2021.03-2021.09
- *InstaOrder dataset collection*, Select Star, Republic of Korea, 2021.03-2021.11
- *Team Open3D. Contributed Nearest Neighbor Module*, Intel Corp., USA, 2020.04-2022.02
- *3D content creation*, Microsoft Reserach Asia, People's Republic of China, 2020.06-2021.06
- *3D human capturing system*, ETRI, Republic of Korea, 2020.03-2020.10
- 과학기술정보통신부 신진연구자 지원사업 + 신진연구 최초 혁신실험실, Ministry of Science and ICT, Republic of Korea, 2020.03-2023.03
- 과학기술정보통신부, 인공지능대학원 지원사업 (POSTECH), Ministry of Science and ICT, Republic of Korea, 2020.02-current
- *Geometric perception from videos and images*, Qualcomm Corp., USA, 2019.10-2021.10
- 포항공과대학교 신입교수 초기정착비, POSTECH, Republic of Korea, 2019.04-2022.02

- 이미지 생성에서 로봇 컨트롤까지, 한양대학교 미래자동차공학과 세미나, Oct. 2025
- 3차원 복원과 실환경 시뮬레이션 이미지 생성에서 로봇 컨트롤까지, 숭실대학교 AI융합학부 콜로퀴움, Dec. 2025
- AI for Geometric Shape Assembly, 삼성미래기술캠퍼스, Dec. 2025
- Vision-driven Actions and Planning, 서울대학교 기계공학부 세미나, Nov. 2025
- Realistic 3D Reconsturction and Rendering for Real-World Simulations, 한국자동차공학회 융합S/W 및 AI부분 워크숍, Oct. 2025
- Realistic 3D Reconsturction and Rendering for Real-World Simulations, 서울대학교 2기 빅데이터 AI CEO과정, Oct. 2025
- Holistic Order Prediction in Natural Scenes, Global AI Frontier Lab, Oct. 2025
- 이미지 생성부터 로봇 컨트롤까지, 서울대학교 공과대학 미래융합기술 최고위과정 (FIP), Oct. 2025
- 3차원 및 4차원 장면 복원 및 압축 기법 동향, 방송미디어공학회 실감미디어 심층기술 워크숍, Sep. 2025
- 3D Vision Research from SNU VGI Lab, POSCO DX, Sep. 2025
- Dynamic GS의 복원과 효율적인 저장 기법 탐구, 한국 방송 및 미디어공학회 춘계 실감미디어 워크숍, May 2025
- 현대 AI 빅데이터 응용 사례, 서울대학교 빅데이터 AI CEO과정, May 2025
- Dynamic GS의 복원과 효율적인 저장 기법 탐구, 한국 방송 및 미디어공학회 춘계 실감미디어 워크숍, Apr. 2025
- 3D Vision Research from SNU VGI Lab, **Naver Labs**, Seongnam, Republic of Korea, March 2025
- 공간표현과 공간지능 최신동향, 과실연 AI 미래 포럼, Youtube Live, March 2025
- 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
- Social Speed Mentoring, **ECCV 2024**, Milano, Italy, Sep. 2024
- 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 Vison 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

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

## REFERENCE

- Up on request.