Jaesik Park

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653 Ho, 303 Dong, 1 Gwanak-ro, Gwanak-gu, Seoul, Republic of Korea (08826)

Working Experiences

Associate Professor — Seoul, Republic of Korea
CSE and IPAI, Seoul National University (**SNU**) — *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 — Seoul, Republic of Korea
CSE and IPAI, Seoul National University (**SNU**) — *2023.09 – 2025.08*

Associate Professor — Pohang, Republic of Korea
CSE and GSAI, Pohang University of Science and Technology (**POSTECH**) — *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 — Pohang, Republic of Korea
CSE and GSAI, Pohang University of Science and Technology (**POSTECH**) — *2019.04 – 2022.08*

Staff Research Scientist — Santa Clara, CA, USA
Intelligent Systems Lab, Intel (Manager: Dr. Vladlen Koltun) — *2015.12 – 2019.03*

- Advised intern students from Stanford University, U.C. Berkeley, and Carnegie Melon 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. — Daejeon, Republic of Korea
Korea Advanced Institute of Science and Technology (**KAIST**) — *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. — Seoul, Republic of Korea
*Hanyang University (**Summa cum laude**)* — *2005.03 – 2009.02*

Publications

International

[1] 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)

[2] Hyeonseong Jeon, Cheolhong Min, and **Jaesik Park**
Tree-Guided Diffusion Planner
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2025

[3] Pierre Musacchio, Hyunmin Lee, and **Jaesik Park**
Holistic Order Prediction in Natural Scenes
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2025

[4] Hyunjin Kim, Haebeom Jung, and **Jaesik Park**
Metropolis-Hastings Sampling for 3D Gaussian Reconstruction
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2025

[5] 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**), 2025

[6] 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)

[7] 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)

[8] 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**)

[9] 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

[10] 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

[11] 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

[12] Haebeom Jung, Namtae Kim, Jungwoo Kim, and **Jaesik Park**
Targetless LiDAR-Camera Calibration with Anchored 3D Gaussians
2504.04597 (arXiv), 2025

[13] Sangmin Kim, Seunguk Do, and **Jaesik Park**
ShowMak3r: Compositional TV Show Reconstruction
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2025

[14] 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

[15] 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

[16] 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

[17] Seungjoo Shin, **Jaesik Park**, and Sunghyun Cho
Locality-aware Gaussian Compression for Fast and High-quality Rendering
Int. Conf. on Learning Representations (**ICLR**), 2025

[18] Ashish Kumar and **Jaesik Park**
Designing Concise ConvNets with Columnar Stages
Int. Conf. on Learning Representations (**ICLR**), 2025

[19] Ashish Kumar and **Jaesik Park**
Cross Resolution Encoding-Decoding For Detection Transformers
2410.04088 (arXiv), 2024

[20] 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)

[21] 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

[22] 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

[23] 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

[24] 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

[25] 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)

[26] 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

[27] 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

[28] 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

[29] 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)

[30] 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.)

[31] 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

[32] 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

[33] Joonghyuk Shin, Minguk Kang, and **Jaesik Park**
Fill-Up: Balancing Long-Tailed Data with Generative Models
2306.07200 (arXiv), 2023

[34] Seoyeon Kim, Minguk Kang, and **Jaesik Park**
RISCLIP: Referring Image Segmentation Framework using CLIP
2306.08498 (arXiv), 2023

[35] 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

[36] 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)

[37] Kwonyoung Ryu, Soonmin Hwang, and **Jaesik Park**
Instant Domain Augmentation for LiDAR Semantic Segmentation
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2023

[38] Kanghee Lee, Junha Lee, and **Jaesik Park**
Learning to Register Unbalanced Point Pairs
3D Vision and Robotics **CVPR workshop**, 2023

[39] Jinoh Cho, Minguk Kang, Vibhav Vineet, and **Jaesik Park**
Instance-Aware Image Completion
AI for Content Creation (AI4CC) **CVPR workshop**, 2023

[40] 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

[41] 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)

[42] Seokjun Ahn, Jungtaek Kim, Minsu Cho, and **Jaesik Park**
Sequential Brick Assembly with Efficient Constraint Satisfaction
2210.01021 (arXiv), 2022

[43] 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)

[44] 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)

[45] 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

[46] 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

[47] 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

[48] 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

[49] Juyong Lee*, Seokjun Ahn*, and **Jaesik Park**
Style-Agnostic Reinforcement Learning
European Conf. on Computer Vision (**ECCV**), 2022
(*Equal contribution)

[50] 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)

[51] 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

[52] Jinhwi Lee, Jungtaek Kim, Hyunsoo Chung, **Jaesik Park**, and Minsu Cho
Learning to Assemble Geometric Shapes
Int. Joint Conf. on Artificial Intelligence (**IJCAI**), 2022

[53] Hyunmin Lee and **Jaesik Park**
Instance-wise Occlusion and Depth Orders in Natural Scenes
Int. Conf. on Computer Vision and Pattern Recognition (**CVPR**), 2022

[54] 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.)

[55] 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

[56] 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**)

[57] Jaesung Choe, Byeongin Joung, Francois Rameau, **Jaesik Park**, and In So Kweon
Deep Point Cloud Reconstruction
Int. Conf. on Learning Representations (**ICLR**), 2022

[58] 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

[59] Junha Lee, Christopher Choy, and **Jaesik Park**
Putting 3D Spatially Sparse Networks on a Diet
2112.01316 (arXiv), 2021

[60] Wei Dong*, Kwonyoung Ryu*, Michael Kaess, and **Jaesik Park**
Revisiting LiDAR Registration and Reconstruction: A Range Image Perspective
2112.02779 (arXiv), 2021
(*Equal contribution)

[61] Jinsoo Choi, **Jaesik Park**, and In So Kweon
Self-Supervised Real-time Video Stabilization
British Machine Vision Conference (**BMVC**), 2021

[62] 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

[63] 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

[64] 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

[65] Junha Lee, Seungwook Kim, Minsu Cho, and **Jaesik Park**
Deep Hough Voting for Robust Global Registration
Int. Conf. on Computer Vision (**ICCV**), 2021

[66] 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 corrresponding authors, **Oral** Presentation, 3.4% acceptance rate)

[67] Hyunmin Lee and **Jaesik Park**
STAD: Stable Video Depth Estimation
IEEE Int. Conf. on Image Processing (**ICIP**), 2021

[68] 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 corrresponding authors)

[69] 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

[70] Jinsoo Choi, **Jaesik Park**, and In So Kweon
High-quality Frame Interpolation via Tridirectional Inference
Winter Conf. on Applications of Computer Vision (**WACV**), 2021

[71] Minguk Kang and **Jaesik Park**
ContraGAN: Contrastive Learning for Conditional Image Generation
Int. Conf. on Neural Information Processing Systems (**NeurIPS**), 2020

[72] 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

[73] 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)

[74] 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

[75] 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)

[76] 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

[77] Christopher Choy*, **Jaesik Park***, and Vladlen Koltun
Fully Convolutional Geometric Features
Int. Conf. on Computer Vision (**ICCV**), 2019
(*Equal contribution)

[78] Jungeon Kim, Hyomin Kim, **Jaesik Park**, and Seungyong Lee
Global Texture Mapping for Dynamic Objects
Pacific Graphics (**PG**), 2019

[79] 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

[80] 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

[81] 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)

[82] Qian-Yi Zhou, **Jaesik Park**, and Vladlen Koltun
Open3D: A Modern Library For 3D Data Processing
1801.09847 (arXiv), 2018

[83] 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

[84] **Jaesik Park**, Qian-Yi Zhou, and Vladlen Koltun
Colored Point Cloud Registration Revisited
Int. Conf. on Computer Vision (**ICCV**), 2017

[85] 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

[86] 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

[87] 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

[88] **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

[89] Qian-Yi Zhou, **Jaesik Park**, and Vladlen Koltun
Fast Global Registration
European Conf. on Computer Vision (**ECCV**), 2016
(**Oral** Presentation, 1.8% acceptance rate)

[90] **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

[91] 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)

[92] 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))

[93] 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

[94] 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

[95] 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

[96] 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

[97] **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

[98] 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

[99] 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

[100] 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.)

[101] **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

[102] **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.)

[103] **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

[104] **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

[105] **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

[106] 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

[107] **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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[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

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[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

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[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 뎁스 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 텍스쳐 맵 생성*, 제 32회 영상처리 및 이해에 관한 워크샵 (IPIU), Feb. 2020

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[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**)

Program Committee

- **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
- Area Chair, International Conference on Computer Vision and Pattern Recognition (CVPR), 2014
- 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

- **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 Artifical 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 Artifical Intelligence Basis II, Fall, 2022
- CSED233 Data Structure, Spring, 2022
- AIGS101 Artifical Intelligence Basis I, Spring, 2022
- AIGS101 Artifical Intelligence Basis II, Fall, 2021
- CSED703F Topics in AI: 3D Vision, Fall, 2021
- AIGS101 Artifical Intelligence Basis I, Spring, 2021
- CSED538/AIGS538 Deep learning, **Awarded as the Best EduTech Class** by POSTECH, Spring, 2021
- AIGS101, Artifical 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, Artifical 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
- *라이다 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-한예종 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 최초혁신실험실*, 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 신임교수 초기정착비*, POSTECH, Republic of Korea, 2019.04-2022.02

Talks

- *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 스플래팅 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 Hierachical 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 — Daejeon, Republic of Korea
KAIST *(Mentor: Prof. In So Kweon)* — *Aug. 2015 – Nov. 2015*

Research Intern — Redmond, WA, USA
Microsoft Research (**MSR**) *(Mentor: Dr. Sudipta N. Sinha)* — *June 2013 – Sep. 2013*

Research Intern — Beijing, China
Microsoft Research Asia (**MSRA**) *(Mentor: Prof. Y. Matsushita)* — *April 2012 – Oct. 2012*

Reference

- Up on request.