

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**)

- 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)

Seoul, Republic of Korea

2025.09 – Present

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 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.

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] Jinhwie 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 (**IJCIV**), 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
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- Domestic
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PROGRAM COMMITTEE

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

AWARDS

- **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
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- **Full Scholarship**, Jeong-Su Scholarship Foundation, Aug. 2006
- **Scholarship for Undergraduate Students**, The Korea Foundation for Advanced Studies (KFAS), June 2006
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TEACHING

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- M2177.008600 Introduction to Artificial Intelligence, Spring, 2025
- M3309.005900 Generative Artificial Intelligence, Fall, 2024
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- 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
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- CSED703F Topics in AI: 3D Vision, Fall, 2021
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- 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

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- 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
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- 효율적인 뉴럴 렌더링 모델 개발, Samsung Advanced Institute of Technology, 2022.12-2023.11
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- 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

- 이미지 생성에서 로봇 컨트롤까지, 한양대학교 미래자동차공학과 세미나, Oct. 2025
- 3차원 복원과 실환경 시뮬레이션 이미지 생성에서 로봇 컨트롤까지, 송실파워 AI융합학부 콜로퀴움, Dec. 2025
- *AI for Geometric Shape Assembly*, 삼성미래기술캠퍼스, Dec. 2025
- *Vision-driven Actions and Planning*, 서울대학교 기계공학부 세미나, Nov. 2025
- *Realistic 3D Reconstruction and Rendering for Real-World Simulations*, 한국자동차공학회 융합S/W 및 AI부분 워크숍, Oct. 2025
- *Realistic 3D Reconstruction 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 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)*, AI혁신허브콜로퀴엄, Jeju, Republic of Korea, May 2023
- *NeRF의 최신 기술 동향, 춘계 방송과 미디어 기술 워크숍*, Seoul, Republic of Korea, May 2023
- 컴퓨터 비전을 위한 딥러닝 프로그래밍, 사단법인 한국컴퓨터비전학회, Online Lecture, Feb. 2023
- 전자공학회 영상이해 연구회 겨울학교, 대한전자공학회, Hoengseong, Republic of Korea, Jan. 2023
- *3D Vision and Open3D*, Seoul National University, Seoul, Republic of Korea (offline+online), Oct. 2022

- *Object Detection from Images or Point Clouds*, **LG Electronics**, Seoul (online), Republic of Korea, Aug. 2022
- *Fast Point Transformer*, **Harvard University**, Boston, MA, USA (online), June 2022
- *Self-Calibrating Neural Radiance Fields*, **Seoul National University**, Seoul, Republic of Korea (online), Feb. 2022
- *Self-Calibrating Neural Radiance Fields*, **DGIST**, Daegu, Republic of Korea (online), Aug. 2021
- *Object Detection from Images or Point Clouds*, **LG Electronics**, Seoul, Republic of Korea, Aug. 2021
- *Self-Calibrating Neural Radiance Fields*, Korea Institute of Science and Technology (**KIST**), Virtual, June 2021
- *Mentor Session: How to Become a Professor*, **CVPR 2021**, Virtual, June 2021
- *Recent Work on Image Generation*, **GIST**, Gwangju, Republic of Korea (online), May 2021
- *Point Cloud Registration using Hierarchical Hough Transform*, 33rd Workshop on Image Processing and Image Understanding (**IPIU 2021**), Virtual, Feb. 2021
- *3D Representations and Detections*, Chungbuk University, Virtual, Jan. 2021
- *Introduction to Computer Vision*, **Kyungbuk Science High School**, Pohang, Republic of Korea, Aug. 2020
- *High-Dimensional Convolutional Networks for Geometric Pattern Recognition*, **KCCV 2020**, Seoul, Aug. 2020
- *Object Detection from Images or Point Clouds*, **LG Electronics**, Seoul, Republic of Korea, Aug. 2020
- *Geometric Pattern Recognition*, 32nd Workshop on Image Proc. and Image Understanding (**IPIU 2020**), Feb. 2020
- *Fully Convolutional Geometric Features*, Koh Young Technology, Yongin, Republic of Korea, Dec. 2019
- *Open3D Tutorial and Fully Convolutional Geometric Features*, **KETI**, Seongnam, Republic of Korea, Nov. 2019
- *Introduction to Computer Vision and Deep Learning*, **Daegu Science High School**, Aug. 2019
- *3D Computer Vision and Open3D*, Int. Conf. on Machine Vision Applications (**MVA**), Tokyo, Japan, May 2019
- *3D Computer Vision and Open3D*, **Qualcomm**, San Diego, USA, June 2019
- *3D reconstruction using Open3D*, Minneapolis, **University of Minnesota**, invited lecture for Multiview 3D Geometry in Computer Vision (CSCI 5980) Class, Apr. 2018
- *3D reconstruction using Open3D*, **Forma Technology** (acquired by **Snap Inc.**), San Francisco, USA, March 2018

OTHER WORKING EXPERIENCES

Post-Doc. Researcher	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.