

# MIN H. KIM (김민혁)

Last updated: 2026.5.9

KAIST (Korea Advanced Institute of Science and Technology)  
School of Computing, Bldg. E3-1, Rm. 2403  
291 Daehak-ro, Yuseong-gu, Daejeon, Korea, 34141

☎ +82 (0)42-350-3564

🌐 <http://vclab.kaist.ac.kr/minhkim/>

📠 +82 (0)42-350-7764

✉ [minhkim@vclab.kaist.ac.kr](mailto:minhkim@vclab.kaist.ac.kr)

@ [Google Scholar](#), [DBLP](#), [ACM](#), [ResearchID](#), [Scopus](#), [Orcid](#), [ResearchGate](#)



## APPOINTMENTS

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- 08/2012– Present **KAIST, Korea, KAIST ICT Endowed Chair Professor of Computer Science**  
– Research areas: **Computer Graphics and Vision**  
(specialized in Computational Imaging and 3D Imaging)  
– Director of the Visual Computing Laboratory (VCLAB), KAIST, Korea
- 08/2010–08/2012 Yale University, USA, Postdoctoral Associate in Computer Science
- 07/2009–07/2010 University College London (UCL), UK, Research Associate in Computer Science

## EDUCATION/TRAINING

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- 08/2010–08/2012 Yale University, USA, Postdoc in Computer Science
- 09/2006–02/2010 University College London (UCL), UK, PhD in Computer Science  
– Thesis: High-Fidelity Colour Reproduction for High-Dynamic-Range Imaging

## AWARDS/FELLOWSHIPS/PRESS RELEASE

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- **Best Paper Award at Eurographics 2026**  
- Splat-based Metal Artifact Reduction in Cone-Beam CT via Polychromatic Modeling (Eurographics, 2026)
- **General Member of the National Academy of Engineering of Korea**  
Appointed as a general member of the National Academy of Engineering of Korea, Korea (2025–2027)
- **KAIST ICT Endowed Chair Professor**  
Appointed as KAIST ICT Endowed Chair Professor for outstanding research career (KAIST, 2023–2026)
- **SK-Hynix Excellence Award of Outstanding Inventions in Industry-Academic Research 2024**  
- Enhancing depth accuracy for time-of-flight (TOF) imaging
- **SK-Hynix Grand Prize of Outstanding Inventions in Industry-Academic Research 2022**  
- Efficient denoising for time-of-flight (TOF) imaging
- **ACM SIGGRAPH Technical Paper Award Honorable Mention 2022**  
- Sparse Ellipsometry: Portable Acquisition of Polarimetric SVBRDF and Shape (SIGGRAPH, 2022)
- **KAIST's Top 10 Research Accomplishments 2021**  
- Differentiable transient rendering for NLOS imaging (KAIST, 2021)
- **KAIST Technology Innovation Excellence Award 2021**  
Awarded for excellence in academic research career
- **S-Oil Excellent Thesis Award (Grand Prize in IT division) by Korea Academy of Science and Technology, 2020**  
Awarded to both outstanding doctoral student and professor who educated his student
- **KAIST Academic Award 2020**  
Awarded for excellence in academic research career
- **KAIST Endowed Chair Professor**  
Appointed as KAIST Endowed Chair Professor for outstanding research career (KAIST, 2019–2022)

- Press release in 2020: [Microsoft Research Blog](#)
  - TextureFusion: acquiring high-quality texture and geometry in real-time (also presented at CVPR 2020)
- Press release in 2018: [Eurekalert](#), [Digital Journal](#), [ScienceDaily](#), [LabRoots](#), [E&T Magazine](#), [New Electronics](#), [TD News](#), [VR Soldier](#), [Spar3D](#), [3DPI](#), and [SciTech](#)
  - To replicate physical objects for virtual reality, just turn on your smartphone (also presented at ACM SIGGRAPH Asia 2018)
- **National R&D Excellence 100 by the Ministry of Science and ICT of Korea, 2018**
  - High-performance image acquisition technology for creating photorealistic imagery
- **KAIST CORE Tech Transfer Day 2018**
  - Compact hyperspectral imaging at low cost (also presented at ACM SIGGRAPH Asia 2017)
  - Six technologies were selected at KAIST in 2018
- **Faculty Career Award of the KAIST School of Computing 2017**
  - Received a faculty award for his outstanding academic career in the KAIST School of Computing
- Press release in 2017: [Eurekalert](#), [Photonics Media](#), [Tech. Breaking News](#), and [R&D Magazine](#)
  - Compact hyperspectral imaging at low cost (also presented at ACM SIGGRAPH Asia 2017)
- **KAIST's Top 10 Research Accomplishments 2016**
  - Birefractive stereo imaging for single-shot depth acquisition (KAIST, 2016)
- **Best Paper Awards**
  - Received Best Application Paper & Demo Awards for outstanding work on 3D imaging at ACCV 2014
  - Received a Best Paper Award for our work on open-source graphics software at VAST 2012
- **KAIST Ewon Assistant Professor**
  - Appointed as a KAIST Ewon Endowed Professor for outstanding young faculty (KAIST, 2013–2016)
- **Naver Young Faculty Fellowship**
  - Received a Naver Young Faculty Fellowship with a grant for outstanding new faculty, 2015
- **Microsoft New Faculty Award in Korea**
  - Received a Microsoft New Faculty Award with a grant for outstanding new faculty in Korea, 2013

## **TECHNICAL PAPER CHAIR/COMMITTEE**

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### **International Program Chair:**

- Eurographics (EG) 2022, Technical Papers Chair
- ACM SIGGRAPH Asia 2022, Courses Chair
- ACM SIGGRAPH Asia 2020, Technical Communications and Posters Co-Chair
- Pacific Graphics (PG) 2023, Program Co-Chair
- Pacific Graphics (PG) 2019, Work-in-Progress Chair
- Int. Conf. on Computer Animation and Social Agents (CASA) 2017, Workshop Chair

### **International Program Committee/Area Chair:**

- ACM SIGGRAPH (Technical Paper) 2021, 2022, 2024, 2025
- ACM SIGGRAPH (Technical Paper Sorter) 2026
- ACM SIGGRAPH (General Submission) 2014, 2015
- ACM SIGGRAPH Asia (Technical Paper) 2017, 2018, 2020, 2023, 2026
- ACM SIGGRAPH Asia (Technical Paper Sorter) 2022
- ACM SIGGRAPH Asia (Technical Briefs and Poster) 2017, 2018, 2019
- ACM SIGGRAPH Asia (Courses Committee) 2018, 2021
- IEEE Computer Vision and Pattern Recognition (CVPR) 2020, 2023, 2024, 2025 (Lead), 2026 (Lead)
- IEEE Int. Conf. on Computer Vision (ICCV) 2019, 2025 (Lead)

- **European Conference on Computer Vision (ECCV)** 2024, 2026 (Lead)
- **Conference on Neural Information Processing Systems (NeurIPS)** 2024, 2025
- **ASIAGRAPHICS (Executive Committee)** 2022
- **IEEE Int. Conf. on Computational Photography (ICCP)** 2021, 2022, 2023
- **Asian Conf. on Computer Vision (ACCV)** 2020
- **Conference on Artificial Intelligence (AAAI)** 2020, 2021, 2022
- **Eurographics (EG)** 2018, 2019, 2025
- **Eurographics Symposium on Rendering (EGSR)** 2021, 2022, 2023
- **Pacific Graphics (PG)** 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021
- **Int. Conf. on Computer Animation and Social Agents (CASA)** 2017, 2018, 2019, 2020, 2021
- **Int. Symp. on Visual Computing (ISVC)** 2018, 2019, 2020, 2021
- **ACM Symposium on Virtual Reality Software and Technology (VRST)** 2018, 2019
- **Int. Conf. on Computational Visual Media (CVM)** 2017, 2019
- **Int. Conf. Multimedia Modeling (MMM)** 2019, 2020
- **CAD/Graphics** 2013, 2015, 2017
- **Int. Society on Virtual Systems and MultiMedia (VSMM)** 2017
- **Int. Symp. on Computational Design and Engineering (ISCDE)** 2017
- **Spring Conf. on Computer Graphics (SCCG)** 2013, 2014, 2015, 2016
- **Eurographics Workshop on Graphics & Cultural Heritage (GCH)** 2014, 2016
- **Pacific-rim Conference on Multimedia (PCM)** 2015, 2016
- **Digital Heritage** 2013, 2015
- **Int. Conf. on Progress in Informatics and Computing (PIC)** 2014, 2015
- **Int. Conf. on Image and Vision Computing New Zealand (IVCNZ)** 2013, 2014, 2015
- **Asian Conf. on Pattern Recognition (ACPR)** 2015
- **Int. Sym. on Ubiquitous Virtual Reality (ISUVR)** 2013
- **Int. Sym. on Virtual Reality, Archaeology & Cultural Heritage (VAST)** 2011, 2012

## EDITORIAL BOARD

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- **Associate Editor, IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI)**, since Jun. 2024
- **Associate Editor, IEEE Transactions on Visualization and Computer Graphics (TVCG)**, since Jan. 2022
- **Associate Editor, ACM Transactions on Applied Perception (TAP)**, Jul. 2016 – Jul. 2023
- **Associate Editor, IEEE Transactions on Computational Imaging (TCI)**, Oct. 2020 – Jun. 2022
- **Associate Editor, Elsevier Computers and Graphics (CAG)**, Aug. 2016 – Jul. 2022
- **Associate Editor, ACM Transactions on Graphics (TOG)**, Jul. 2014 – Aug. 2017

## PUBLICATIONS

[TOP CONF./TOTAL PUB.: 54/107 (J. 46, C. 65), TOTAL IF: 223.266]

### Top Conferences/Journals (SIGGRAPH/SIGGRAPH Asia) in Computer Graphics<sup>§</sup>: (25 papers)

- [J1] Shinyoung Yi, Jiwoong Na, Seungmin Hwang, Inseung Hwang, **Min H. Kim** (2025), “Frame-Free Representation of Polarized Light for Resolving Stokes Vector Singularities,” *ACM Transactions on Graphics (ACM TOG)*, 44(6), presented at **SIGGRAPH Asia 2025**, Dec. 15 – 18. 2025, (SCI-IF=9.5)

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<sup>§</sup>Nowadays SIGGRAPH papers are presented in two tracks: Conference and Journal tracks. Papers in both tracks are presented in either SIGGRAPH or SIGGRAPH Asia conferences, which are top CS conferences in computer graphics. In particular, the journal track papers are published in **ACM TOG**, which is the top journal (IF=9.5 in 2024) that ranks 1st in computer graphics publications, according to Google Scholar Metrics.

- [J2] Yixin Zeng, Kiseok Choi, Hadi Amata, Kaizhang Kang, Wolfgang Heidrich, Hongzhi Wu, **Min H. Kim** (2025), “Designing and Fabricating Color BRDFs with Differentiable Wave Optics,” *ACM Transactions on Graphics (ACM TOG)*, 44(6), presented at **SIGGRAPH Asia 2025**, Dec. 15 – 18. 2025, (**SCI-IF=9.5**)
- [C1] Yunseong Moon, Ryota Maeda, Suhyun Shin, Inseung Hwang, Youngchan Kim, **Min H. Kim**, Seung-Hwan Baek (2025), “Hyperspectral Polarimetric BRDFs of Real-world Materials,” presented at **SIGGRAPH Asia 2025**, Dec. 15–18. 2025, Hong Kong, China
- [J3] Hyunho Ha, Inseung Hwang, Nestor Monzon, Jaemin Cho, Donggun Kim, Seung-Hwan Baek, Adolfo Muñoz, Diego Gutierrez, **Min H. Kim** (2024), “Polarimetric BSSRDF Acquisition of Dynamic Faces,” *ACM Transactions on Graphics (ACM TOG)*, 43(6), presented at **SIGGRAPH Asia 2024**, Dec. 3–6. 2024, (**SCI-IF=7.403**)
- [J4] Shinyoung Yi, Donggun Kim, Jiwoong Na, Xin Tong, **Min H. Kim** (2024), “Spin-Weighted Spherical Harmonics for Polarized Light Transport,” *ACM Transactions on Graphics (ACM TOG)*, 43(4), presented at **SIGGRAPH 2024**, Jul. 28–Aug. 1, 2024, (**SCI-IF=7.403**)
- [C2] Kiseok Choi, Inchul Kim, Dongyoung Choi, Julio Marco, Diego Gutierrez, **Min H. Kim** (2023), “Self-Calibrating, Fully Differentiable NLOS Inverse Rendering,” presented at **SIGGRAPH Asia 2023**, Dec. 12–15, Sydney, Australia
- [J5] Inseung Hwang, Daniel S. Jeon, Adolfo Muñoz, Diego Gutierrez, Xin Tong, **Min H. Kim** (2022), “Sparse Ellipsometry: Portable Acquisition of Polarimetric SVBRDF and Shape With Unstructured Flash Photography,” *ACM Transactions on Graphics (ACM TOG)*, 41(4), presented at **SIGGRAPH 2022**, Aug 8–Aug 11, 2022, (**SCI-IF=7.403**)
- [J6] Hyeonjoong Jang, Andréas Meuleman, Dahyun Kang, Donggun Kim, Christian Richardt, **Min H. Kim** (2022), “Egocentric Scene Reconstruction From an Omnidirectional Video,” *ACM Transactions on Graphics (ACM TOG)*, 41(4), presented at **SIGGRAPH 2022**, Aug 8–Aug 11, 2022, (**SCI-IF=7.403**)
- [J7] Shinyoung Yi, Donggun Kim, Kiseok Choi, Adrian Jarabo, Diego Gutierrez, **Min H. Kim** (2021), “Differentiable Transient Rendering,” *ACM Transactions on Graphics (ACM TOG)*, 40(6), presented at **SIGGRAPH Asia 2021**, Dec. 14–Dec. 17, 2021, (**SCI-IF=7.403**)
- [J8] Mustafa B. Yaldiz, Andreas Meuleman, Hyeonjoong Jang, Hyunho Ha, **Min H. Kim** (2021), “Deep-FormableTag: End-to-end Generation and Recognition of Deformable Fiducial Markers,” *ACM Transactions on Graphics (ACM TOG)*, 40(4), presented at **SIGGRAPH 2021**, Aug 9–Aug 13, 2021, (**SCI-IF=7.403**)
- [J9] Seung-Hwan Baek, Tizian Zeltner, Hyun Jin Ku, Inseung Hwang, Xin Tong, Wenzel Jakob, **Min H. Kim** (2020), “Image-Based Acquisition and Modeling of Polarimetric Reflectance,” *ACM Transactions on Graphics (ACM TOG)*, 39(4), presented at **SIGGRAPH 2020**, July 19–July 23, 2020, (**SCI-IF=5.414**)
- [J10] Daniel S. Jeon, Seung-Hwan Baek, Shinyoung Yi, Qiang Fu, Xiong Dun, Wolfgang Heidrich, **Min H. Kim** (2019), “Compact Snapshot Hyperspectral Imaging with Diffracted Rotation,” *ACM Transactions on Graphics (ACM TOG)*, 38(4), presented at **SIGGRAPH 2019**, July 28–August 1, 2019, pp. 117:1–13 (**SCI-IF=5.084**)
- [J11] Giljoo Nam, Joo Ho Lee, Diego Gutierrez, **Min H. Kim** (2018), “Practical SVBRDF Acquisition of 3D Objects with Unstructured Flash Photography,” *ACM Transactions on Graphics (ACM TOG)*, 37(6), presented at **SIGGRAPH Asia 2018**, Dec. 4, 2018 (**SCI-IF=6.495**)

- [J12] Seung-Hwan Baek, Daniel S. Jeon, Xin Tong, **Min H. Kim** (2018), “Simultaneous Acquisition of Polarimetric SVBRDF and Normals,” *ACM Transactions on Graphics (ACM TOG)*, 37(6), presented at **SIGGRAPH Asia 2018**, Dec. 4, 2018 (**SCI-IF=6.495**)
- [J13] Joo Ho Lee, Adrián Jarabo, Daniel S. Jeon, Diego Gutierrez, **Min H. Kim** (2018), “Practical Multiple Scattering for Rough Surfaces,” *ACM Transactions on Graphics (ACM TOG)*, 37(6), presented at **SIGGRAPH Asia 2018**, Dec. 4, 2018 (**SCI-IF=6.495**)
- [J14] Inchang Choi, Daniel S. Jeon, Giljoo Nam, Diego Gutierrez, **Min H. Kim** (2017), “High-Quality Hyperspectral Reconstruction Using a Spectral Prior,” *ACM Transactions on Graphics (ACM TOG)*, 36(6), pp. 218:1–13, presented at **SIGGRAPH Asia 2017**, Nov. 27, 2017 (**SCI-IF=4.384**)
- [J15] Seung-Hwan Baek, Incheol Kim, Diego Gutierrez, **Min H. Kim** (2017), “Compact Single-Shot Hyperspectral Imaging Using a Prism,” *ACM Transactions on Graphics (ACM TOG)*, 36(6), pp. 217:1–12, presented at **SIGGRAPH Asia 2017**, Nov. 27, 2017 (**SCI-IF=4.384**)
- [J16] Julio Marco, Quercus Hernandez, Adolfo Munoz, Yue Dong, Adrian Jarabo, **Min H. Kim**, Xin Tong, Diego Gutierrez (2017), “DeepToF: Off-the-Shelf Real-Time Correction of Multipath Interference in Time-of-Flight Imaging,” *ACM Transactions on Graphics (ACM TOG)*, 36(6), pp. 219:1–12, presented at **SIGGRAPH Asia 2017**, Nov. 27, 2017 (**SCI-IF=4.384**)
- [J17] Giljoo Nam, Joo Ho Lee, Hongzhi Wu, Diego Gutierrez, **Min H. Kim** (2016), “Simultaneous Acquisition of Microscale Reflectance and Normals,” *ACM Transactions on Graphics (ACM TOG)*, 35(6), pp. 185:1–11, presented at **SIGGRAPH Asia 2016**, Dec. 5, 2016 (**SCI-IF=4.088**)
- [J18] Seung-Hwan Baek, Diego Gutierrez, **Min H. Kim** (2016), “Birefractive Stereo Imaging for Single-Shot Depth Acquisition,” *ACM Transactions on Graphics (ACM TOG)*, 35(6), pp. 194:1–11, presented at **SIGGRAPH Asia 2016**, Dec. 5, 2016 (**SCI-IF=4.088**)
- [J19] **Min H. Kim**, Todd Alan Harvey, David S. Kittle, Holly Rushmeier, Julie Dorsey, Richard O. Prum, David J. Brady (2012), “3D Imaging Spectroscopy for Measuring Hyperspectral Patterns on Solid Objects,” *ACM Transactions on Graphics (ACM TOG)*, 31(4), presented at **SIGGRAPH 2012**, Aug. 05, 2012, pp. 38:1–11 (**SCI-IF=3.361**)
- [J20] Patrick Paczkowski, **Min H. Kim**, Yann Morvan, Julie Dorsey, Holly Rushmeier, Carol O’Sullivan (2011), “Insitu: Sketching Architectural Designs in Context,” *ACM Transactions on Graphics (ACM TOG)*, 30(6), presented at **SIGGRAPH Asia 2011**, Dec. 12, 2011, pp. 182:1–10 (**SCI-IF=3.489**)
- [J21] **Min H. Kim**, Tobias Ritschel, Jan Kautz (2011), “Edge-Aware Color Appearance,” *ACM Transactions on Graphics (ACM TOG)*, 30(2), presented at **SIGGRAPH 2011**, Apr. 01, 2011, pp. 13:1–9 (**SCI-IF=3.489**)
- [J22] **Min H. Kim**, Tim Weyrich, Jan Kautz (2009), “Modeling Human Color Perception under Extended Luminance Levels,” *ACM Transactions on Graphics (ACM TOG)*, 28(3), presented at **SIGGRAPH 2009**, Jul. 27, 2009, pp. 27:1–9 (**SCI-IF=3.619**)
- [J23] Tobias Ritschel, Thorsten Grosch, **Min H. Kim**, Hans-Peter Seidel, Carsten Dachsbacher, Jan Kautz (2008), “Imperfect Shadow Maps for Efficient Computation of Indirect Illumination,” *ACM Transactions on Graphics (ACM TOG)*, 27(5), presented at **SIGGRAPH Asia 2008**, Dec. 10, 2008, pp. 129:1–8 (**SCI-IF=3.383**)

#### **Top Conferences (CVPR/ICCV/ECCV) in Computer Vision\*: (28 papers)**

- [C3] Kiseok Choi, Jaemin Cho, Inchul Kim, **Min H. Kim** (2026) “Splat-Based Metal Artifact Reduction in Cone-Beam CT via Compact Attenuation Modeling,” *Proc. IEEE/CVF Computer Vision and Pattern Recognition (CVPR)*, Denver, Colorado, United States, Jun. 3–7, 2026

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\*CS top conferences in computer vision include CVPR/ICCV/ECCV.

- [C4] Kiseok Choi, Hyeongjun Cho, Inchul Kim, **Min H. Kim** (2026) “Revisiting Pose Sensitivity in Splat-based Computed Tomography under Sparse-view Reconstruction,” Proc. IEEE/CVF Computer Vision and Pattern Recognition (**CVPR**), Denver, Colorado, United States, Jun. 3–7, 2026
- [C5] Hakyong Kim, Ruicheng Wang, Chengtang Yao, Jiaolong Yang, **Min H. Kim** (2026) “Dense Metric Depth Completion from Sparse Direct Time-of-Flight Sensors,” Proc. IEEE/CVF Computer Vision and Pattern Recognition (**CVPR**), Denver, Colorado, United States, Jun. 3–7, 2026
- [C6] Hyeonjoong Jang, Dongyoung Choi, Donggun Kim, Woohyun Kang, **Min H. Kim** (2025) “Splat-based 3D Scene Reconstruction with Extreme Motion-blur,” Proc. IEEE International Conference on Computer Vision (**ICCV**), Honolulu, HI, United States, Oct. 19 – 23, 2025
- [C7] Inseung Hwang, Kiseok Choi, Hyunho Ha, **Min H. Kim** (2025) “Benchmarking Burst Super-Resolution for Polarization Images: Noise Dataset and Analysis,” Proc. IEEE International Conference on Computer Vision (**ICCV**), Honolulu, HI, United States, Oct. 19 – 23, 2025
- [C8] Hyunho Ha, Lei Xiao, Christian Richardt, Thu Nguyen-Phuoc, Changil Kim, **Min H. Kim**, Douglas Lanman, Numair Khan (2025) “Geometry-guided Online 3D Video Synthesis with Multi-View Temporal Consistency,” Proc. IEEE Computer Vision and Pattern Recognition (**CVPR**), Nashville, United States, Jun. 11 – 15, 2025
- [C9] Dongyoung Choi, Hyeonjoong Jang, **Min H. Kim** (2024) “OmniLocalRF: Omnidirectional Local Radiance Fields from Dynamic Videos,” Proc. IEEE Computer Vision and Pattern Recognition (**CVPR**), Seattle, United States, Jun. 17 – 21, 2024
- [C10] Hakyong Kim, Andreas Meuleman, Hyeonjoong Jang, James Tompkin, **Min H. Kim** (2024) “OmniSDF: Scene Reconstruction using Omnidirectional Signed Distance Functions and Adaptive Binotrees,” Proc. IEEE Computer Vision and Pattern Recognition (**CVPR**) 2024, Seattle, United States, Jun. 17 – 21, 2024
- [C11] Jungwoo Kim, **Min H. Kim** (2023) “Joint Demosaicing and Deghosting of Time-Varying Exposures for Snapshot HDR Imaging,” Proc. IEEE International Conference on Computer Vision (**ICCV**), Paris, France, Oct. 4 – 6, 2023
- [C12] Donggun Kim, Hyeonjoong Jang, Inchul Kim, **Min H. Kim** (2023) “Spatio-Focal Bidirectional Disparity Estimation from a Dual-Pixel Image,” Proc. IEEE Computer Vision and Pattern Recognition (**CVPR**) 2023, Vancouver, Canada, Jun. 18 – 22, 2023
- [C13] Daniel S. Jeon, Andreas Meuleman, Seung-Hwan Baek, **Min H. Kim** (2023) “Polarimetric iToF: Measuring High-Fidelity Depth through Scattering Media,” Proc. IEEE Computer Vision and Pattern Recognition (**CVPR**) 2023, Vancouver, Canada, Jun. 18 – 22, 2023
- [C14] Andreas Meuleman, Yu-Lun Liu, Chen Gao, Jia-Bin Huang, Changil Kim, **Min H. Kim**, Johannes Kopf (2023) “Progressively Optimized Local Radiance Fields for Robust View Synthesis,” Proc. IEEE Computer Vision and Pattern Recognition (**CVPR**) 2023, Vancouver, Canada, Jun. 18 – 22, 2023
- [C15] Andreas Meuleman, Hakyong Kim, James Tompkin, **Min H. Kim** (2022) “FloatingFusion: Depth from ToF and Image-stabilized Stereo Cameras” Proc. European Conference on Computer Vision (**ECCV**) 2022, Tel Aviv, Oct. 23 – 27, 2022
- [C16] Donghun Kang, Hyeonjoong Jang, Jungeon Lee, Chong-Min Kyung, **Min H. Kim** (2022) “Uniform Subdivision of Omnidirectional Camera Space for Efficient Spherical Stereo Matching,” Proc. IEEE Computer Vision and Pattern Recognition (**CVPR**) 2022, New Orleans, USA, Jun. 19 – 24, 2022

- [C17] Seung-Hwan Baek, Hayato Ikoma, Daniel S. Jeon, Yuqi Li, Wolfgang Heidrich, Gordon Wetzstein, **Min H. Kim** (2021) “Single-shot Hyperspectral-Depth Imaging with Learned Diffractive Optics,” Proc. IEEE International Conference on Computer Vision (ICCV) 2021, Montreal, Canada & Virtual, Oct 11, 2021 – Oct 17, 2021
- [C18] Andreas Meuleman, Hyeonjoong Jang, Daniel S. Jeon, **Min H. Kim** (2021) “Real-Time Sphere Sweeping Stereo from Multiview Fisheye Images,” Proc. IEEE Computer Vision and Pattern Recognition (CVPR Oral) 2021, Nashville, Tennessee, USA, June 19–25, 2021
- [C19] Hakyeong Kim, Andreas Meuleman, Daniel S. Jeon, **Min H. Kim** (2021) “High-Quality Stereo Image Restoration from Double Refraction,” Proc. IEEE Computer Vision and Pattern Recognition (CVPR) 2021, Nashville, Tennessee, USA, June 19–25, 2021
- [C20] Hyunho Ha, Joo Ho Lee, Andreas Meuleman, **Min H. Kim** (2021) “NormalFusion: Real-Time Acquisition of Surface Normals for High-Resolution RGB-D Scanning,” Proc. IEEE Computer Vision and Pattern Recognition (CVPR) 2021, Nashville, Tennessee, USA, June 19–25, 2021
- [C21] Numair Khan, **Min H. Kim**, James Tompkin (2021) “Differentiable Diffusion for Dense Depth Estimation from Multi-view Images,” Proc. IEEE Computer Vision and Pattern Recognition (CVPR) 2021, Nashville, Tennessee, USA, June 19–25, 2021
- [C22] Joo Ho Lee, Hyunho Ha, Yue Dong, Xin Tong, **Min H. Kim** (2020) “TextureFusion: High-Quality Texture Acquisition for Real-Time RGB-D Scanning,” Proc. IEEE Computer Vision and Pattern Recognition (CVPR Oral, Best Paper Finalist) 2020, Seattle, WA, USA, June 14–19, 2020
- [C23] Andreas Meuleman, Seung-Hwan Baek, Felix Heide, **Min H. Kim** (2020) “Single-shot Monocular RGB-D Imaging using Uneven Double Refraction,” Proc. IEEE Computer Vision and Pattern Recognition (CVPR Oral) 2020, Seattle, WA, USA, June 14–19, 2020
- [C24] Inchang Choi, Orazio Gallo, Alejandro Troccoli, **Min H. Kim**, Jan Kautz (2019) “Extreme View Synthesis,” Proc. IEEE International Conference on Computer Vision (ICCV Oral) 2019, Seoul, Korea, Oct. 27–Nov. 2, 2019
- [C25] Numair Khan, Qian Zhang, Lucas Kasser, Henry Stone, **Min H. Kim**, James Tompkin (2019) “View-consistent 4D Light Field Superpixel Segmentation,” Proc. IEEE International Conference on Computer Vision (ICCV Oral) 2019, Seoul, Korea, Oct. 27–Nov. 2, 2019
- [C26] Giljoo Nam, Chenglei Wu, **Min H. Kim**, Yaser Sheik (2019) “Strand-accurate Multi-view Hair Capture,” Proc. IEEE Computer Vision and Pattern Recognition (CVPR Oral) 2019, Long Beach, CA, USA, June 16–20, 2019
- [C27] Lizhi Wang, Chen Sun, Ying Fu, **Min H. Kim**, Huang Hua (2019) “Hyperspectral Image Reconstruction Using a Deep Spatial-Spectral Prior,” Proc. IEEE Computer Vision and Pattern Recognition (CVPR) 2019, Long Beach, CA, USA, June 16–20, 2019
- [C28] Daniel S. Jeon, Seung-Hwan Baek, Inchang Choi, **Min H. Kim** (2018) “Enhancing the Spatial Resolution of Stereo Images using a Parallax Prior,” Proc. IEEE Computer Vision and Pattern Recognition (CVPR) 2018, Salt Lake City, USA, June 18, 2018
- [C29] Seung-Hwan Baek, Inchang Choi, **Min H. Kim** (2016) “Multiview Image Completion with Space Structure Propagation,” Proc. IEEE Computer Vision and Pattern Recognition (CVPR) 2016, Las Vegas, USA, June 26, 2016, pp. 488–496
- [C30] Joo Ho Lee, Inchang Choi, **Min H. Kim** (2016) “Laplacian Patch-Based Image Synthesis,” Proc. IEEE Computer Vision and Pattern Recognition (CVPR) 2016, Las Vegas, USA, June 26, 2016, pp. 2727–2735

### Other Top Conferences<sup>‡</sup>: (1 paper)

- [C31] Patrick Paczkowski, Julie Dorsey, Holly Rushmeier, **Min H. Kim** (2014), “Paper3D: Bringing Casual 3D Modeling to a Multi-Touch Interface,” Proc. ACM User Interface Software and Technology Symposium (ACM UIST) 2014, Honolulu, USA, Oral presentation (long paper), Oct. 5, 2014, pp. 23–32

### Other International SCI-E Journals:

- [J24] Jae-Myeong Kwon, Yejoon Kwon, Young-Gil Cha, Dong Hyun Han, Hyun-Kyung Kim, Je-Kyun Park, **Min H. Kim**, Ki-Hun Jeong (2026) “Biologically inspired microlens array camera for high-resolution wide field-of-view imaging,” *Nature Communications*, 2026 (**SCI-IF=17.20**)
- [J25] Kiseok Choi, Inchul Kim, Jaemin Cho, Hyeongjun Cho, and **Min H. Kim** (2026) “Splat-based Metal Artifact Reduction in Cone-Beam CT via Polychromatic Modeling,” *Computer Graphics Forum (CGF)*, presented at **EUROGRAPHICS 2026**, 45(2), May 04–08, 2026 (**SCI-IF=2.90**)
- [J26] Hyun-Kyung Kim, Young-Gil Cha, Jae-Myeong Kwon, Sang-In Bae, Kisoo Kim, Kyung-Won Jang, Yong-Jin Jo, **Min H. Kim**, and Ki-Hun Jeong (2025) “Biologically-inspired microlens array camera for high-speed and high-sensitivity imaging” *AAAS Science Advances*, 2025, (**SCI-IF=13.60**)
- [J27] Numair Khan, **Min H. Kim**, James Tompkin (2024) “Are Multi-view Edges Incomplete for Depth Estimation?” *International Journal of Computer Vision (IJCV)*, 2024, (**SCI-IF=19.50**)
- [J28] Young-Gil Cha, Jiwoong Na, Hyun-Kyung Kim, Jae-Myeong Kwon, Seok-Haeng Huh, Seung-Un Jo, Chang-Hwan Kim, **Min H. Kim**, Ki-Hun Jeong (2023) “Joint Demosaicing and Deghosting of Time-Varying Exposures for Single-Shot HDR Imaging,” *Optics Express (OE)*, Vol. 31, Issue 18, pp. 29589-29595 (2023) (**SCI-IF=3.833**)
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- [K16] **Min Hyuk Kim**, Giljoo Nam, Joo Ho Lee, “Method and system for simultaneous acquisition of microscale reflectance and normals”, KR Patent App. : 10-2016-0121871, published in September 23, 2016, **KR Patent: 10-1873648, registered** in Jun. 26, 2018.
- [K17] **Min Hyuk Kim**, Joo Ho Lee, “Laplacian patch-based image synthesis method and apparatus therefor”, KR Patent App.: 10-2016-0102032, published in August 10, 2016. **KR Patent: 10-1837286, registered** in Mar. 5, 2018.
- [K18] **Min Hyuk Kim**, Giljoo Nam, Haebom Lee, Jung Mook Lim, “Vision Inspection System for Color Defect Detection in Flat Panel Displays”, KR Patent App.: 10-2015-0149762, published in Oct. 27, 2015. **KR Patent: 10-1834812, registered** in Feb. 27, 2018.
- [K19] **Min Hyuk Kim**, Joo Ho Lee, “Method for Producing of Spherical Harmonic Lighting Locally, and Spherical Harmonic Rendering Apparatus”, KR Patent App.: 10-2014-0194343, published in Dec. 30, 2014. **KR Patent: 10-1659933, registered** in Sep. 20, 2016.
- [K20] **Min Hyuk Kim**, Seung-Hwan Baek, “Method and Apparatus for Generating Depth map Using Refractive Medium on Binocular Base”, KR Patent App.: 10-2015-0002987, published in Jan. 08, 2015. **KR Patent: 10-1632069, registered** in Jun. 14, 2016.
- [K21] **Min Hyuk Kim**, Haebom Lee, “Hyperspectral Imaging System”, KR Patent App.: 10-2014-0150251, published in Oct. 31, 2014. **KR Patent: 10-1632067, registered** in Jun. 14, 2016.
- [K22] **Min Hyuk Kim**, Giljoo Nam, “Multispectral Photometric Stereo System and Operating Method”, KR Patent App.: 10-2015-0032781, published in Mar. 09, 2015. **KR Patent: 10-1630856, registered** in Jun. 09, 2016.

**Korean Patent Applications: (11 applications)**

- [K23] **Min Hyuk Kim**, Hyunho Ha, “High-Resolution 3D Scanning Method Using Real-Time Acquisition Of Surface Normals And The System Thereof”, KR Patent App.: 10-2022-0017271, published in February 10, 2022.
- [K24] Gun Bang, Jung Won Kang, Soo Woong Kim, Seong Jun Bae, Jin Ho Lee, Ha Hyun Lee, Sung Chang Lim, **Min Hyuk Kim**, Da Hyun Kang, “Estimating high-accuracy depth information from light fields using optical flow”, KR Patent App.: 10-2021-0162409, published in November 23, 2021.
- [K25] **Min Hyuk Kim**, Daniel S. Jeon, “Image Acquisition Method For TOF Camera”, KR Patent App.: 10-2021-0090674, published in July 12, 2021.
- [K26] Donghun Kang, **Min Hyuk Kim**, Hyeonjoong Jang, “Method For Estimating Angle Values Of Spherical Image Using Equal Epipolar Line Subdivision And Apparatus Therefore”, KR Patent App.: 10-2021-0049639, published in April 16, 2021.
- [K27] Won-Seok Choi, Hyun Sang Park, **Min Hyuk Kim**, Chong-Min Kyung, “Gray Pixel Detection Method For White Balancing And System Thereof”, KR Patent App.: 10-2021-0025347, published in February 25, 2021.
- [K28] **Min Hyuk Kim**, Joo Ho Lee, Hyunjin Ku, Dahyun Kang, Hyunho Ha, “Capturing spatially-varying reflectance functions using a mobile phone with a flash”, KR Patent App.: 10-2020-0130867, published in October 12, 2020.
- [K29] Gun Bang, Jung Won Kang, Soo Woong Kim, Seong Jun Bae, Jin Ho Lee, Ha Hyun Lee, Sung Chang Lim, **Min Hyuk Kim**, Da Hyun Kang, “Method And Apparatus For Estimating High-Accuracy Depth Information From Light Fields Using Optical Flow”, KR Patent App.: 10-2020-0158756, published in November 24, 2020.
- [K30] Se-Yoon Jeong, Tae-Jin Lee, Shin-Young Yi, **Min Hyuk Kim**, “Video Compression Method and Apparatus to Support Content Background Luminance-Adaptive Opto-Electric/Electro-Optic Transfer Functions”, KR Patent App.: 10-2019-0156250, published in November 29, 2019.
- [K31] Se-Yoon Jeong, **Min Hyuk Kim**, Shin-Young Yi, Jung-won Kang, Hui-yong Kim, Ha-kyeong Kim, “Method And Apparatus for Opto-Electric/Elctro-Optic Transfer”, KR Patent App.: 10-2019-0150312, published in November 21, 2019.
- [K32] Jeong, Se-Yoon, **Min Hyuk Kim**, Yi, Shin-Young, Kang, Jung-Won, Kim, Hui-Yong, Kim, Ha-Kyeong, “Apparatus And Method For Converting Luminance-Adaptive Opto-Electric/Electro-Optic For HDR Video Transfer And Compression”, KR Patent App.: 10-2018-0148957, published in November 27, 2018.
- [K33] **Min Hyuk Kim**, Inchang Choi, “Method for Rendering the Virtual Viewpoint Image Based on Collaboration With a Plurality of Camera Devices”, KR Patent App.: 10-2018-0025603, published in March 5, 2018.

## INVITED TALKS

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### Keynote Speeches (at International Conferences):

- [1] **CAD/Graphics 2019**, Qingdao, China, “Beyond Human Vision - Seeing More with Camera,” May 5–7, 2019
- [2] Asian Conference on Design and Digital Engineering (ACDDE), Seoul, Korea, “Visual Computing with Camera in 3D Graphics,” August 13, 2013

### Workshops/Seminars/Tutorials:

- [3] **Imperial College London**, “Physical Imaging Beyond Human Vision: From Spectrum to Polarization,” Invited talk Sep. 25, 2025
- [4] **NVIDIA**, “Geometry-Aware Omnidirectional Imaging for Efficient Scene Understanding,” Invited talk Jun. 16, 2024

- [5] **University of Hong Kong**, “Self-Calibrating, Fully Differentiable NLOS Inverse Rendering,” Workshop on Frontiers of Image Science and Visual Computing, Apr. 8, 2024
- [6] **National Institute of Agricultural Sciences**, “Introduction to Advanced Hyperspectral Imaging Technology,” Mar. 25, 2024
- [7] **Samsung Display**, “Introduction to Computer Vision,” Jul. 15–Sep. 2, 2022
- [8] **Huawei Technologies Japan**, Tokyo Research Center, “Physics-based material estimation: Differentiable Acquisition of Appearance and 3D Geometry,” in Digital Human Workshop, Dec. 13, 2021
- [9] **China Society of Image and Graphics (CSIG)**, International Seminar on Differentiable Acquisition of Visual Information, “Differentiable Acquisition of Appearance & 3D Geometry,” Oct. 23, 2021
- [10] **Samsung Display**, “Introduction to Computer Vision,” Apr. 7–Jun. 11, 2021
- [11] **University of Seoul**, “Advanced Image-based Modeling for Capturing High-Fidelity SVBRDFs,” Jan. 19, 2021
- [12] **Huawei Technologies Japan**, Tokyo Research Center, “Advanced Image-based Modeling for Capturing High-Fidelity SVBRDFs,” Mar. 27, 2020
- [13] **Microsoft Research Asia (MSRA)**, Microsoft Research Asia Academic Day Workshop 2019, “Compact Snapshot Hyperspectral Imaging with Diffracted Rotation,” Nov. 7–8, 2019
- [14] **Beijing Institute of Technology (BIT)**, invited by Prof. Lizhi Wang, “Advanced Hyperspectral Imaging,” Oct. 16, 2018
- [15] **Microsoft Research Asia (MSRA)**, Beijing, invited by Dr. Xin Tong, “Advanced Hyperspectral Imaging,” Oct. 15, 2018
- [16] **University of Science and Technology of China (USTC)**, invited by Prof. Xuejin Chen, “Advanced Hyperspectral Imaging,” July 30, 2018
- [17] **University of Reims Champagne-Ardenne** in France, invited by Prof. Celine Loscos, “Advanced Hyperspectral Imaging,” July 20, 2018
- [18] **Imperial College London** in UK, invited by Prof. Abhijeet Ghosh, “Advanced Hyperspectral Imaging,” July 16, 2018
- [19] International Symposium on Computational Design & Engineering (ISCDE), Ho Chi Minh, Vietnam, “3D Imaging Foundations for Augmented Reality and Virtual Reality,” (Tutorial) December 15, 2017
- [20] Samsung Advanced Institute of Technology (SAIT), Suwon, Korea, “Capturing the Real World to Make Graphics Closer to Reality,” August 30, 2017
- [21] International Conference on Computer Animation and Social Agents (CASA), Seoul, Korea, “3D Imaging for Acquiring Realistic 3D Objects for Virtual Reality and Augmented Reality,” (Tutorial) May 23, 2017
- [22] **Asia Faculty Summit of Microsoft Research**, Seoul, Korea, “Capturing the Real World to Make Graphics Closer to Reality,” November 4, 2016
- [23] NAVER Labs, Seongnam, Korea, “Closer to Reality: Capturing, Understanding and Interacting in Computer Graphics,” Feb. 25, 2016
- [24] Koh Young Technology, Seoul, Korea, “Introduction to 3D Imaging Based on Structured Lighting,” Aug. 20, 2015
- [25] Summer Conference of Society of CAD/CAM Engineers, Myongji University, Yongin-si, Korea, “Introduction to Hyperspectral 3D Imaging,” Aug. 19, 2015
- [26] ETRI (Electronics and Telecommunications Research Institute), Daejeon, Korea, “Introduction to Hyperspectral 3D Imaging,” Jul. 28, 2015
- [27] **Yale University**, Department of Computer Science, New Haven, **USA**, “Introduction to Hyperspectral 3D Imaging,” Feb. 17, 2015
- [28] **TECHNION**, KAIST–TECHNION Symposium, Haifa, **Israel**, “Advanced Imaging and Perception of Material Appearance,” Dec. 07, 2014

- [29] Kolon, Techno-Leadership Course, Daejeon, Korea, “Advanced 3D Imaging and Perception of Material Appearance,” Jul. 19, 2014
- [30] UNIST, School of Design and Human Engineering, Ulsan, Korea, “Advanced 3D Imaging and Perception of Material Appearance,” May 20, 2014
- [31] KAIST, Bio and Brain Engineering Department, Daejeon, Korea, “Advanced 3D Imaging and Perception of Material Appearance,” April 16, 2014
- [32] **National Tsing Hua University**, Asian Workshop on Smart Sensor System, Hualien, **Taiwan**, “Advanced Imaging and Perception of Material Appearance,” March 21, 2014
- [33] Koh Young Technology, Seoul, Korea, “Advanced 3D Imaging for Analyzing Materials,” October 27, 2013
- [34] POSTECH, Computer Science Department, Pohang, Korea, “Advanced Imaging and Perception of Material Appearance,” October 2, 2013
- [35] **Zhejiang University**, State Key Lab. of CAD & CG, Hangzhou, **China**, “High-Fidelity Acquisition and Representation in Graphics,” July 16, 2013
- [36] International Symposium on Ubiquitous Virtual Reality (ISUVR), Daejeon, Korea, “Visual Perception for High-Fidelity Representation in Graphics,” July 12, 2013
- [37] KOLON-KAIST LSI Center Colloquium, Daejeon, Korea, “High-Fidelity Color Representation in Computer Graphics,” June 13, 2013
- [38] KAIST CS & WebST Colloquium, Daejeon, Korea, “Visual Computing with Camera,” June 10, 2013
- [39] Center for Integrated Smart Sensor (CISS) Workshop, Daejeon, Korea, “Advanced Image Processing Techniques: 3D Photography,” June 5, 2013
- [40] LG Electronics, Software Platform R&D Lab., Seoul, Korea, “High Fidelity in Computer Graphics,” May 22, 2013
- [41] Center for Integrated Smart Sensor (CISS) Seminar, Daejeon, Korea, “Visual Computing in Computer Graphics,” February 27, 2013
- [42] Samsung Electronics, DMC R&D Center, Suwon, Korea, “The Future of the Camera,” November 15, 2012
- [43] KAIST, Computer Science Dept., Daejeon, Korea, “High-Fidelity Representation in Computer Graphics,” November 2, 2011
- [44] **Vision@UCL, London, UK**, “Modelling Human Colour Perception under Extended Luminance Levels,” October 8, 2009

## **SUPERVISION**

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### **Current PhD Students:**

- [1] Inseung Hwang (황인승), Polarimetric imaging, March 2020–ongoing, PhD, KAIST, Korea
- [2] Hakyong Kim (김하경), learning-based 3D vision, March 2021–ongoing, PhD, KAIST, Korea
- [3] Donggun Kim (김동건), high-quality 3D scene reconstruction, March 2022–ongoing, PhD, KAIST, Korea
- [4] Inchul Kim (김인철), Real-time 4D reflectance imaging, September 2022–ongoing, PhD, KAIST, Korea
- [5] Hyeongjun Cho (조형준), 3D imaging, March 2023–ongoing, PhD, KAIST, Korea
- [6] Jaemin Cho (조재민), 3D imaging, August 2023–ongoing, PhD, KAIST, Korea
- [7] Jiwoong Na (나지웅), Dual-pixel imaging, March 2024–ongoing, PhD, KAIST, Korea
- [8] Dongyoung Choi (최동영), Neural rendering, March 2024–ongoing, PhD, KAIST, Korea
- [9] Sanghyeon Lee (이상현), Sensor fusion, September 2024–ongoing, PhD, KAIST, Korea
- [10] Seungmin Hwang (황승민), Hyperspectral imaging, March 2025–ongoing, PhD, KAIST, Korea
- [11] Seeha Lee (이시하), HDR imaging, March 2025–ongoing, PhD, KAIST, Korea

### **Current MS Students:**

- [12] Woohyun Kang (강우현), 3D imaging, September 2024–ongoing, MS, KAIST, Korea

- [13] Harin Kim (김하린), 3D imaging, March 2025–ongoing, MS, KAIST, Korea
- [14] Seung Chan Hwang (황승찬), 3D imaging, March 2026–ongoing, MS, KAIST, Korea
- [15] Jong Mo Park (박종모), Hyperspectral imaging, September 2026–ongoing, MS, KAIST, Korea

**Supervised PhDs:**

- [1] Kiseok Choi (최기석), *Physically based CT Reconstruction with Differentiable Rendering*, March 2021–February 2026, PhD, KAIST, Korea  
(Current position) **Postdoc researcher, KAIST VCLAB, Korea**
- [2] Hyunho Ha (하현호), *Physically-based 4D Acquisition of Geometry and Appearance*, March 2019–February 2025, PhD, KAIST, Korea  
(Current position) **Research Scientist, NAVER Labs, Korea**
- [3] Hyeonjoong Jang (장현중), *Omnidirectional 3D Scene Reconstruction in the Wild*, August 2019–February 2025, PhD, KAIST, Korea  
(Current position) **Team Leader, Research Institute, Hypergram Inc., Korea**
- [4] Shinyoung Yi (이신영), *Extending Mueller Calculus to the Directional Domain for Polarized Light Transport*, September 2020–February 2025, PhD, KAIST, Korea  
(Current position) **Professor of Computer Science, Kyung Hee University, Korea**
- [5] Andreas Meuleman, *Integrated RGB-D Imaging for Efficient 3D Scene Understanding*, March 2020–August 2023, PhD, KAIST, Korea  
(Current position) **Postdoctoral Research Scientist, INRIA, France**
- [6] Daniel S. Jeon (전석준), *Physically-based Phasor Imaging for Advanced Scene Understanding*, September 2016–February 2023, PhD, KAIST, Korea  
(Current position) **Research Institute Director, Hypergram Inc., Korea**
- [7] Joo Ho Lee (이주호), *Digital Reproduction of Scene Appearance for High-Fidelity Computer Graphics*, September 2014–September 2020, PhD, KAIST, Korea  
(Current position) **Professor of Computer Science, Sogang University, Korea**
- [8] Giljoo Nam (남길주), *Image-based Modeling for High-quality 3D Geometry and Reflectance*, September 2015–August 2019, PhD, KAIST, Korea  
(Current position) **Research Scientist, Meta Reality Labs, Pittsburgh, PA, United States**
- [9] Inchang Choi (최인창), *Learning-Based Image Reconstruction for Computational Photography*, February 2012–February 2019, PhD, KAIST, Korea  
(Current position) **Camera Algorithm & Prototyping Architect, Apple, California, United States**
- [10] Seung-Hwan Baek (백승환), *Computational Imaging with Light Waves*, March 2015–February 2019, PhD, KAIST, Korea  
(Current position) **Professor of Computer Science, POSTECH, Korea**

**Supervised Masters:**

- [11] Yeonwoo Lim (임연우), *Reinforcement-Learned Adaptive Optical Modulation for Compressive Hyperspectral Imaging*, March 2024–February 2026, MS, KAIST, Korea
- [12] Yejoon Kwon (권예준), *Grid-Aware Transformers for High-Fidelity Depth Estimation in Front-Parallel Light Fields* March 2024–February 2026, MS, KAIST, Korea
- [13] Sanghyeon Lee (이상현), *Multi-Lane Detection and Tracking using Temporally-Recursive Catmull-Rom Splines*, September 2022–September 2024, MS, KAIST, Korea
- [14] Jiwoong Na (나지웅), *Developing an HDR 3D Imaging Algorithm for an Ultra-thin Light-Field Camera*, March 2022–February 2024, MS, KAIST, Korea
- [15] Dongyoung Choi (최동영), *OmniLocalRF: Omnidirectional Local Radiance Fields from Dynamic Videos*, March 2022–February 2024, MS, KAIST, Korea

- [16] Jaemin Cho (조재민), *Physically-Based Neural Rendering of Multiplane Images*, August 2021–August 2023, MS, KAIST, Korea
- [17] Hyeongjun Cho (조형준), *Multiview Phase-Measuring Profilometry Calibration using a Static Target*, March 2020–March 2023, MS, KAIST, Korea
- [18] Jung Woo Kim (김정우), *Demosaicing a Time-Varying Exposures Array for Snapshot HDR Imaging*, March 2021–February 2023, MS, KAIST, Korea
- [19] Mustafa Yaldiz, *Representation Learning-Based Image Restoration for High-Performance Computational Imaging*, March 2020–August 2022, MS, KAIST, Korea
- [20] Donggun Kim (김동건), *Real-time image restoration of sub-aperture images for ultra-thin light field cameras*, September 2020–February 2022, MS, KAIST, Korea
- [21] Hyunjin Ku (구현진), *Practical SVBRDF Acquisition of 3D Objects from Single-View RGB-D Images*, March 2019–February 2021, MS, KAIST, Korea
- [22] Hakyong Kim (김하경), *High-Quality Stereo Image Restoration from Double Refraction*, March 2019–February 2021, MS, KAIST, Korea
- [23] Dahyun Kang (강다현), *View-dependent Scene Appearance Synthesis using Inverse Rendering from Light Fields*, March 2019–February 2021, MS, KAIST, Korea
- [24] Shinyoung Yi (이신영), *Modeling Surround-Aware Contrast Sensitivity for HDR Applications*, March 2018–August 2020, MS, KAIST, Korea
- [25] Inseung Hwang (황인승), *Single-shot Acquisition of Cylindrical Mesostructure Normals using Diffuse Illumination*, March 2018–February 2020, MS, KAIST, Korea
- [26] Hyeonjoong Jang (장현중), *Fast Omnidirectional Depth Densification*, August 2017–August 2019, MS, KAIST, Korea
- [27] Hyunho Ha (하현호), *Dynamic Acquisition of SVBRDF, Geometry and Motion Using a Single RGBD Camera*, March 2017–February 2019, MS, KAIST, Korea
- [28] Yeong Beum Lee (이영범), *Integrated Calibration of Mutliview Phase-Measuring Profilometry*, April 2014–February 2018, MS, KAIST, Korea
- [29] Mingyun Kang (강민균), *Real-Time HDR Video Tone Mapping for High Efficiency Video Coding*, March 2016–February 2018, MS, KAIST, Korea
- [30] Incheol Kim (김인철), *Dehazing using Non-Local Regularization with Iso-Depth Neighbor-Fields*, March 2015–February 2017, MS, KAIST, Korea
- [31] Daniel S. Jeon (전석준), *Multisampling Compressive Video Spectroscopy*, July 2014–August 2016, MS, KAIST, Korea
- [32] Haebom Lee (이해봄), *Building a Two-Way Hyperspectral Imaging System with Liquid Crystal Tunable Filters*, September 2014–August 2015, MS, KAIST, Korea
- [33] Seung-Hwan Baek (백승환), *Stereo Fusion using a Refractive Medium on a Binocular Base*, April 2013–February 2015, MS, KAIST, Korea
- [34] Giljoo Nam (남길주), *Developing a Multispectral Photometric Stereo System for Acquiring High-Fidelity Surface Normals*, September 2012–August 2014, MS, KAIST, Korea
- [35] Joo Ho Lee (이주호), *Locally Adaptive Products for Genuine Spherical Harmonic Lighting*, September 2012–August 2014, MS, KAIST, Korea

**Supervised Students in Other Universities:**

- [36] Erika Astegiano, *Gaussian Splatting-based SLAM*, August 2025–November 2025, MS, Polytechnic University of Turin, Italy
- [37] Andréas Meuleman, *Birefractive stereo imaging*, December 2017–August 2018, MS, INSA-Rouen, France
- [38] Antoine Nicole, *Visualizing dynamic computer graphics models*, December 2017–August 2018, MS, UTBM, France

- [39] Lou Kramer, *Estimating BRDF from light field*, September 2016–August 2017, MS, Technical University of Munich (TUM), Germany
- [40] Patrick Paczkowski, 3D modeling, December 2010–2017, PhD, co-supervised with Prof. Julie Dorsey, Yale University, USA

## TEACHING

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### KAIST, Korea (2012–Present, taught in English):

- |      |                                                        |                    |
|------|--------------------------------------------------------|--------------------|
| [1]  | CS580 (2026 Spring): Computer Graphics                 | (Eval.: /5.00)     |
| [2]  | CS484 (2025 Fall): Introduction to Computer Vision     | (Eval.: 4.27/5.00) |
| [3]  | CS380 (2025 Spring): Introduction to Computer Graphics | (Eval.: 4.59/5.00) |
| [4]  | CS484 (2024 Fall): Introduction to Computer Vision     | (Eval.: 4.55/5.00) |
| [5]  | CS101 (2024 Spring): Introduction to Programming       | (Eval.: 4.35/5.00) |
| [6]  | CS484 (2023 Fall): Introduction to Computer Vision     | (Eval.: 4.37/5.00) |
| [7]  | CS580 (2023 Spring): Interactive Computer Graphics     | (Eval.: 4.58/5.00) |
| [8]  | CS101 (2023 Spring): Introduction to Programming       | (Eval.: 4.35/5.00) |
| [9]  | CS484 (2022 Fall): Introduction to Computer Vision     | (Eval.: 4.09/5.00) |
| [10] | CS482 (2022 Fall): Interactive Computer Graphics       | (Eval.: 4.16/5.00) |
| [11] | CS101 (2022 Spring): Introduction to Programming       | (Eval.: 4.39/5.00) |
| [12] | CS484 (2021 Fall): Introduction to Computer Vision     | (Eval.: 4.49/5.00) |
| [13] | CS380 (2021 Spring): Introduction to Computer Graphics | (Eval.: 4.50/5.00) |
| [14] | CS101 (2021 Spring): Introduction to Programming (C/D) | (Eval.: 4.40/5.00) |
| [15] | CS484 (2020 Fall): Introduction to Computer Vision     | (Eval.: 4.26/5.00) |
| [16] | CS482 (2020 Spring): Computer Graphics                 | (Eval.: 4.05/5.00) |
| [17] | CS482 (2019 Fall): Interactive Computer Graphics       | (Eval.: 4.53/5.00) |
| [18] | CS484 (2019 Fall): Introduction to Computer Vision     | (Eval.: 4.25/5.00) |
| [19] | CS576 (2019 Spring): Computer Vision                   | (Eval.: 3.96/5.00) |
| [20] | CS484 (2018 Fall): Introduction to Computer Vision     | (Eval.: 4.00/5.00) |
| [21] | CS380 (2018 Spring): Introduction to Computer Graphics | (Eval.: 4.64/5.00) |
| [22] | CS681 (2017 Fall): Computational Colorimetry           | (Eval.: 4.75/5.00) |
| [23] | CS580 (2017 Spring): Computer Graphics                 | (Eval.: 4.07/5.00) |
| [24] | CS101 (2017 Spring): Introduction to Programming       | (Eval.: 4.57/5.00) |
| [25] | CS482 (2016 Fall): Interactive Computer Graphics       | (Eval.: 4.32/5.00) |
| [26] | COE203 (2016 Fall): Design Project for IT Convergence  | (Eval.: 5.00/5.00) |
| [27] | CS101 (2016 Spring): Introduction to Programming (C/D) | (Eval.: 4.18/5.00) |
| [28] | CS681 (2015 Fall): Computational Colorimetry           | (Eval.: 4.60/5.00) |
| [29] | COE203 (2015 Fall): Design Project for IT Convergence  | (Eval.: 3.84/5.00) |
| [30] | CS101 (2015 Spring): Introduction to Programming (G/H) | (Eval.: 4.16/5.00) |
| [31] | CS380 (2015 Spring): Introduction to Computer Graphics | (Eval.: 4.22/5.00) |
| [32] | ITC203 (2014 Fall): Design Project for IT Convergence  | (Eval.: 4.43/5.00) |
| [33] | CS101 (2014 Fall): Introduction to Programming (G/H)   | (Eval.: 4.23/5.00) |
| [34] | CS681 (2014 Fall): Computational Colorimetry           | (Eval.: 4.08/5.00) |
| [35] | CS580 (2014 Spring): Computer Graphics                 | (Eval.: 4.48/5.00) |
| [36] | CS492B (2013 Fall): Intermediate Computer Graphics     | (Eval.: 4.52/5.00) |
| [37] | CS101 (2013 Spring): Introduction to Programming (K/L) | (Eval.: 4.10/5.00) |
| [38] | CS780 (2012 Fall): Computational Colorimetry           | (Eval.: 4.89/5.00) |