MIN H. KIM (김민혁)

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APPOINTMENTS

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

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

- **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

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** (General Submission) 2014, 2015
- **ACM SIGGRAPH Asia (Technical Paper)** 2017, 2018, 2020, 2023
- **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)
- **IEEE Int. Conf. on Computer Vision (ICCV)** 2019, 2025 (Lead)
- **European Conference on Computer Vision (ECCV)** 2024
- **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

- **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.: 44/93 (J. 41, C. 53), TOTAL IF: 194.128]

Top Conferences/Journals (SIGGRAPH/SIGGRAPH Asia) in Computer Graphics[§]: (22 papers)

[J1]   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)**

[J2]   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)**

[§]**ACM TOG** is the top journal (IF=6.495 in 2020) that is ranked as top 0.9% in the JCR journal list of Computer Science and Software Engineering and also the top journal in computer graphics. All manuscripts in TOG are simultaneously presented at the top conferences in computer graphics, either **SIGGRAPH** or **SIGGRAPH Asia**.

[C1] 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

[J3] 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)**

[J4] 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)**

[J5] 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)**

[J6] Mustafa B. Yaldiz, Andreas Meuleman, Hyeonjoong Jang, Hyunho Ha, **Min H. Kim** (2021), "DeepFormableTag: 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)**

[J7] 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)**

[J8] 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)**

[J9] 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)**

[J10] 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)**

[J11] 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)**

[J12] 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)**

[J13] 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)**

[J14] 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)**

[J15] 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)**

[J16] 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)**

[J17] **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)**

[J18] 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)**

[J19] **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)**

[J20] **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)**

[J21] 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[*]**: (22 papers)**

[C2] Dongyoung Choi, Hyeonjoong Jang, **Min H. Kim** (2024) "OmniLocalRF: Omnidirectional Local Radiance Fields from Dynamic Videos," Proc. IEEE Computer Vision and Pattern Recognition (**CVPR**) 2024, Seattle, United States, Jun. 17 – 21, 2024

[C3] Hakyeong Kim, Andreas Meuleman, Hyeonjoong Jang, James Tompkin, **Min H. Kim** (2024) "OmniSDF: Scene Reconstruction using Omnidirectional Signed Distance Functions and Adaptive Binoctrees," Proc. IEEE Computer Vision and Pattern Recognition (**CVPR**) 2024, Seattle, United States, Jun. 17 – 21, 2024

[C4] 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

[C5] 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

[C6] 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

[C7] 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

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

[C8] Andreas Meuleman, Hakyeong 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

[C9] 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

[C10] 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

[C11] 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

[C12] 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

[C13] 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

[C14] 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

[C15] 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

[C16] 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

[C17] 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

[C18] 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

[C19] 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

[C20] 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

[C21] 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

[C22] 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

[C23] 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[‡]: (1 paper)

[C24] 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:

[J22] 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)**

[J23] 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)**

[J24] 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)**

[J25] Hyeonjoong Jang, Sanghoon Cho, Daniel S. Jeon, Dahyun Kang, Myeongho Song, Changhyun Park, Jaewon Kim, **Min H. Kim**, Ki-Hun Jeong (2023) "Automated Visual Inspection of Defects in Transparent Display Layers using Light-Field 3D Imaging," IEEE Transactions on Semiconductor Manufacturing (TSM), **(SCI-IF=2.796)**

[J26] Myeong-Su Ahn, Jaehun Jeon, Charles Soon Hong Hwang, Daniel S. Jeon, **Min H. Kim**, Ki-Hun Jeong (2023) "Actively Tunable Spectral Filter for Compact Hyperspectral Camera using Angle-Sensitive Plasmonic Structures," Advanced Materials Technologies, 2201482, **(SCI-IF=8.856)**

[J27] Lingfei Song, Lizhi Wang, **Min H. Kim**, Hua Huang (2022) "High-Accuracy Image Formation Model for Coded Aperture Snapshot Spectral Imaging," IEEE Transactions on Computational Imaging (TCI), 8, pp. 188–200 **(SCI-IF=4.708)**

[J28] Shinyoung Yi, Daniel S. Jeon, Ana Serrano, Se-Yoon Jeong, Hui-Yong Kim, Diego Gutierrez, **Min H. Kim** (2022) "Modelling Surround-aware Contrast Sensitivity for HDR Displays," Computer Graphics Forum (CGF) **(SCI-IF=2.363)**

[J29] Hyunho Ha, Seung-Hwan Baek, Giljoo Nam, **Min H. Kim** (2020), "Progressive Acquisition of SVBRDF and Shape in Motion," Computer Graphics Forum (CGF), presented at **Eurographics** 2021, Vienna, Austria, May 3–7, 2021**(SCI-IF=2.078)**

[J30] Patrick Paczkowski, Julie Dorsey, Holly Rushmeier, **Min H. Kim** (2019), "PaperCraft3D: Paper-Based 3D Modeling and Scene Fabrication," IEEE Transactions on Visualization and Computer Graphics (**IEEE TVCG**), 25(4), pp. 1717–1731, Apr. 1, 2019, **(SCI-IF=4.558)**

[‡]ACM UIST is one of the top conferences along with ACM CHI in the human-computer-interaction (HCI) area.

[J31] Dongmin Keum, Kyung-Won Jang, Daniel S. Jeon, Charles S. Hwang, Elke K. Buschbeck, **Min H. Kim**, Ki-Hun Jeong (2018), "Xenos peckii vision inspires an ultrathin digital camera," **Nature - Light: Science & Applications**, 80:7(1), Oct. 24, 2018 **(SCI-IF=14.000)**

[J32] Inchang Choi, Seung-Hwan Baek, **Min H. Kim** (2017), "Reconstructing Interlaced High-Dynamic-Range Video using Joint Learning," IEEE Transactions on Image Processing (**IEEE TIP**), 26(11), pp. 5353 – 5366, Nov. 2017 **(SCI-IF=5.072)**

[J33] Yeong Beum Lee, **Min H. Kim** (2017), "Integrated calibration of multiview phase-measuring profilometry," Elsevier Optics and Lasers in Engineering (**Elsevier OLIE**), 98(C), pp. 118–122, Nov. 2017 **(SCI-IF=3.388)**

[J34] Kyung-Won Jang, Sung-Pyo Yang, Seung-Hwan Baek, Min-Suk Lee, Hyeon-Cheol Park, Yeong-Hyeon Seo, **Min H. Kim**, Ki-Hun Jeong (2016), "Electrothermal MEMS parallel plate rotation for single-imager stereoscopic endoscopes," OSA Optics Express (**OSA OE**), May 2, 2016, 24 (9), pp. 9667–9672 **(SCI-IF=3.307)**

[J35] Daniel S. Jeon, Inchang Choi, **Min H. Kim** (2016), "Multisampling Compressive Video Spectroscopy," Computer Graphics Forum (**CGF**), presented at **EUROGRAPHICS** 2016, May 12, 2016, 35 (2), 467–477 **(SCIE-IF=1.611)**

[J36] Seung-Hwan Baek, **Min H. Kim** (2016), "Stereo Fusion: Combining Refractive and Binocular Disparity," Computer Vision and Image Understanding (**CVIU**), Elsevier, May 01, 2016, 146, pp. 52–66 **(SCIE-IF=2.498)**

[J37] Giljoo Nam, Haebom Lee, Sungsoo Oh, **Min H. Kim** (2016), "Measuring Color Defects in Flat Panel Displays using HDR Imaging and Appearance Modeling," IEEE Transactions on Instrumentation and Measurement (**IEEE TIM**), Feb. 01, 2016, 65(2), pp.297–304 **(SCI-IF=2.456)**

[J38] Giljoo Nam, **Min H. Kim** (2014), "Multispectral Photometric Stereo for Acquiring High-Fidelity Surface Normals," IEEE Computer Graphics and Applications (**IEEE CG&A**), Sep. 09, 2014, 34(6), pp.57–68 **(SCI-IF=0.911)**

[J39] **Min H. Kim**, Holly Rushmeier, John ffrench, Irma Passeri, and David Tidmarsh (2014), "Hyper3D: 3D Graphics Software for Examining Cultural Artifacts," ACM Journal on Computing and Cultural Heritage (**ACM JOCCH**), 7(3), Aug. 01, 2014, pp. 1:1–19

[J40] James Tompkin, **Min H. Kim**, Kwang In Kim, Jan Kautz, Christian Theobalt (2013), "Preference and Artifact Analysis for Video Transitions of Places," ACM Transactions on Applied Perception (**ACM TAP**), presented at SAP 2013, 10(3), Aug. 01, 2013, pp. 13:1–19 **(SCIE-IF=1.051)**

[J41] Insu Yu, Andrew Cox, **Min H. Kim**, Tobias Ritschel, Thorsten Grosch, Carsten Dachsbacher, Jan Kautz (2009), "Perceptual Influence of Approximate Visibility in Indirect Illumination," ACM Transactions on Applied Perception (**ACM TAP**), presented at APGV 2009, 6(4), Sep. 01, 2009, pp. 24:1–14 **(SCIE-IF=1.447)**

[J42] **Min H. Kim**, Jan Kautz (2008), "Characterization for High Dynamic Range Imaging," Computer Graphics Forum (**CGF**), 27(2), present at **EUROGRAPHICS** 2008, Apr. 24, 2008, pp. 691–697 **(SCIE-IF= 1.860)**

Other International Conference Proceedings:

[C25] Hyun Jin Ku, Hyunho Ha, Joo Ho Lee, Dahyun Kang, James Tompkin, **Min H. Kim** (2022) "Differentiable Appearance Acquisition from a Flash/No-flash RGB-D Pair," Proc. IEEE International Conference on Computational Photography (ICCP 2022), Caltech, Pasadena, August 1-3, 2022

[C26] Numair Khan, **Min H. Kim**, James Tompkin (2021) "Edge-aware Bidirectional Diffusion for Dense Depth Estimation from Light Fields," Proc. British Machine Vision Conference (BMVC) 2021, Virtual, November 22–25, 2021

[C27] Shinyoung Yi, Daniel S. Jeon, Ana Serrano, Se-Yoon Jeong, Hui-Yong Kim, Diego Gutierrez, **Min H. Kim** (2021) "Modeling Surround-aware Contrast Sensitivity," Proc. Eurographics Symposium on Rendering (EGSR 2021) 2021, Saarbrücken, Germany & Virtual, June 29 – July 2, 2021

[C28] Dahyun Kang, Daniel S. Jeon, Hakyeong Kim, Hyeonjoong Jang, **Min H. Kim** (2021) "View-dependent Scene Appearance Synthesis using Inverse Rendering from Light Fields," Proc. IEEE International Conference on Computational Photography (ICCP) 2021, Haifa, Israel, May 23–25, 2021

[C29] Numair Khan, **Min H. Kim**, James Tompkin (2020) "View-consistent 4D Light Field Depth Estimation," Proc. British Machine Vision Conference (BMVC) 2020, Virtual, September 7–10, 2020

[C30] Inseung Hwang, Daniel S. Jeon, **Min H. Kim** (2020) "Single-shot Acquisition of Cylindrical Mesostructure Normals using Diffuse Illumination," Proc. International Conference on Computer Vision Theory and Applications (VISAPP 2020, Oral), Valletta, Malta, February 27–29, 2020

[C31] Hyeonjoong Jang, Hyunho Ha, Daniel S. Jeon, **Min H. Kim** (2019) "Fast Omnidirectional Depth Densification," Proc. International Symposium on Visual Computing (ISVC 2019, Oral), Lake Tahoe, Nevada, USA, October 7–9, 2019

[C32] Inchang Choi, Yeong Beum Lee, Dae R. Jeong, Insik Shin, **Min H. Kim** (2019) "Light-weight Novel View Synthesis for Casual Multiview Photography," Proc. International Symposium on Visual Computing (ISVC 2019, Oral), Lake Tahoe, Nevada, USA, October 7–9, 2019

[C33] Mingyun Kang, Joo Ho Lee, Inchang Choi, **Min H. Kim** (2019) "Real-time HDR Video Tone Mapping using High Efficiency Video Coding," Proc. IEEE International Conference on Image Processing (ICIP 2019), Taipei, Taiwan, September 22–25, 2019

[C34] Incheol Kim, **Min H. Kim** (2019) "Non-local Haze Propagation with an Iso-Depth Prior," Springer Communications in Computer and Information Science (CCIS), January 23 2019, pp. 213–238

[C35] Joo Ho Lee, Seung-Hwan Baek, **Min H. Kim** (2017) "Urban Image Stitching using Planar Perspective Guidance," Proc. British Machine Vision Conference (BMVC) 2017, London, U.K., September 4–7, 2017

[C36] Soomin Kim, Taeyoung Kim, **Min H. Kim**, Sung-eui Yoon (2017) "Image Completion with Intrinsic Reflectance Guidance," Proc. British Machine Vision Conference (BMVC) 2017, London, U.K., September 4–7, 2017

[C37] Incheol Kim, **Min H. Kim** (2017) "Dehazing using Non-Local Regularization with Iso-Depth Neighbor-Fields," Proc. Int. Joint Conf. Computer Vision, Imaging and Computer Graphics Theory and Applications (VISIGRAPP 2017) - Vol. 4: VISAPP, Porto, Portugal, February 27–March 1, 2017, pp. 77–88

[C38] Dongmin Keum, Daniel S. Jeon, Charles S. H. Hwang, Elke K. Buschbeck, **Min H. Kim**, Ki-Hun Jeong (2016) "Ultrathin Camera Inspired by Visual System Of Xenos Peckii," Proc. IEEE International Conference on Micro Electro Mechanical Systems (MEMS 2016), Shanghai, China, Jan. 24, 2016, 4 pages.

[C39] Kyung-Won Jang, Sung-Pyo Yang, Seung-Hwan Baek, **Min H. Kim**, Ki-Hun Jeong (2016) "Electrothermal MEMS Parallel Plate Rotation for Real Time Stereoscopic Endoscopic Imaging," Proc. IEEE International Conference on Micro Electro Mechanical Systems (MEMS 2016), Shanghai, China, Jan. 24, 2016, 4 pages.

[C40] Dongmin Keum, Daniel S. Jeon, **Min H. Kim**, Ki-Hun Jeong (2015) "Artificial Compound Eye Inspired by Imaging Principle Of Xenos Peckii," Proc. IEEE International Conference on Solid-State Sensors, Actuators and Microsystems (TRANSDUCERS 2015), Anchorage, Alaska, USA, Jun. 21, 2015, pp. 403–406.

[C41] Dongmin Keum, Inchang Choi, **Min H. Kim**, Ki-Hun Jeong (2015) "Design and microfabrication of an artificial compound eye inspired by vision mechanism of Xenos peckii," Proc. SPIE Photonics West 2015, San Francisco, California, USA, Feb. 7—8 2015, Vol. 9341, Article. 4.

[C42] Kyung-Won Jang, Sung-Pyo Yang, Seung-Hwan Baek, **Min H. Kim** and Ki-Hun Jeong, "Single Camera based Miniaturized Stereoscopic System for 3D Endoscopic Imaging," Proc. SPIE Nano-Bio Sensing Imaging and Spectroscopy (NBSIS 2015), Jeju, Korea, Feb. 25, 2015

[C43] Minsam Ko, Chayanin Wong, Sunmin Son, Euigon Jung, Uichin Lee, Seungwoo Choi, Sungho Jo, **Min H. Kim** (2015) "Lock n' LoL: Mitigating Smartphone Disturbance in Co-located Social Interactions," ACM Computer-Human Interaction (**ACM CHI**) 2015, Seoul, Korea, Apr. 18, 2015, Works-in-Progress Report

[C44] Seung-Hwan Baek, **Min H. Kim** (2015), "Stereo Fusion using a Refractive Medium on a Binocular Base," Proc. Asian Conference on Computer Vision (**ACCV**) 2014, **Oral presentation**, Singapore, Apr. 16, 2015, Springer Lecture Notes in Computer Science (LNCS) Vol. 9004, Part II, pp. 503–518 **<Received Best Application Paper & Demo Awards>**

[C45] Haebom Lee, **Min H. Kim** (2014), "Building a Two-Way Hyperspectral Imaging System with Liquid Crystal Tunable Filters," Proc. Int. Conf. Image and Signal Processing (ICISP) 2014, Springer LNCS Vol. 8509, Oral presentation, Normandy, France, Jul. 2, 2014, pp. 26–34

[C46] Joo Ho Lee, **Min H. Kim** (2014), "Locally Adaptive Products for Genuine Spherical Harmonic Lighting," Proc. WSCG 2014 (International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision), Oral presentation, Plzen, Czech Republic, Jun. 2, 2014, pp. 27–36

[C47] **Min H. Kim** (2013), "3D Graphics Techniques for Capturing and Inspecting Hyperspectral Appearance," Proc. IEEE International Symposium on Ubiquitous Virtual Reality (ISUVR) 2013, Daejeon, Korea, Jul. 10, 2013, pp. 1–4 <Invited Paper>

[C48] **Min H. Kim**, Holly Rushmeier, John ffrench, Irma Passeri (2012), "Developing Open-Source Software for Art Conservators," Proc. International Symposium on Virtual Reality, Archaeology and Cultural Heritage (VAST) 2012, Brighton, UK, Nov. 19, 2012, pp. 97–104 **<Received a Best Paper Award>**

[C49] **Min H. Kim**, Holly Rushmeier (2011), "Radiometric Characterization of Spectral Imaging for Textual Pigment Identification," Proc. International Symposium on Virtual Reality, Archaeology and Cultural Heritage (VAST) 2011, Prato, Italy, Oct. 18, 2011, pp. 57–64

[C50] David S. Kittle, Daniel L. Marks, **Min H. Kim**, Holly Rushmeier, David J. Brady (2011), "Design and Fabrication of a UV-Visible Coded Aperture Spectral Imager (CASI)," Frontiers in Optics, Optical Society of America (OSA), San Jose, California, USA, Oct. 16, 2011, paper FTuZ3

[C51] **Min H. Kim**, Jan Kautz (2009), "Consistent Scene Illumination using a Chromatic Flash," Proc. Eurographics Workshop on Computational Aesthetics in Graphics, Visualization, and Imaging (CAe) 2009, British Columbia, Canada, May 28, 2009, pp. 83–89

[C52] **Min H. Kim**, Jan Kautz (2008), "Consistent Tone Reproduction," Proc. 10th IASTED Conference on Computer Graphics and Imaging (CGIM) 2008, Innsbruck, Austria, Feb. 13, 2008, pp. 152–159

[C53] **Min H. Kim**, Lindsay W. MacDonald (2006) "Rendering High Dynamic Range Images," Proc. EVA 2006 London Conference, EVA Conferences International, London, Jul. 25, 2006, pp. 22.1–11

Book Chapters:

[B1] **Min H. Kim** (2016), "Foundations and Applications of 3D Imaging," In Chong-Min Kyung, editor, *Theory and Applications of Smart Cameras*, Ch. I. 4, pp. 63–86, Springer.

[B2] **Min H. Kim** (2015), "The Three-Dimensional Evolution of Hyperspectral Imaging," In Youn-Long Lin, Chong-Min Kyung, Hiroto Yasuura, Yongpan Liu, editors, *Smart Sensors and Systems*, Ch. II. 1, pp. 63–84, Springer.

[B3] **Min H. Kim**, Nicolas Hautiere and Celine Loscos (2013), "Digital Cameras: Definitions and Principles," In Laurent Lucas, Celine Loscos, Yannick Remion, editors, *3D Video: From Capture to Diffusion*, Ch. 2, pp. 23–42, Wiley-ISTE, London.

Misc:

[M1] **Min H. Kim**, Holly Rushmeier, David S. Kittle, David J. Brady (2011), "A Coded Aperture-Based Hyperspectral Imaging Application for Avian Material Appearance," IEEE International Conference on Computational Photography (ICCP) 2011, Pittsburgh, PA, April 9, 2011, Poster

[M2] **Min H. Kim** (2010) High-Fidelity Colour Reproduction for High-Dynamic-Range Imaging, PhD thesis, London: University College London

[M3] **Min H. Kim** (2005) Development of High Dynamic Range Imaging System Model: Algorithms of assembly, storage, and display of HDR images, MSc thesis, London: London College of Communication

[M4] **Min H. Kim** (2004), "Photographic Retouching: Augment reality and improve visual quality on portrait photographic images through anatomy and drawing technique," Magazine of Korean Professional Photographer Association, Seoul, January–November (Vol. 317–327), 2004

[M5] **Min H. Kim** (2003) Research on Portrait Retouching: Augment reality and improve visual quality on portrait photographic images through anatomy and drawing technique, MA thesis, Seoul: Chung-Ang University

PATENTS [INT. PAT.: 23 (11 REG., 12 APP.), KR PAT.: 33 (22 REG., 11 APP.)]

International Patents Registered: (11 patents)

[I1] **Min Hyuk Kim**, Suk Jun Jeon, "METHOD AND DEVICE FOR IMAGING OF LENSLESS HYPERSPECTRAL IMAGE", **EU Patent App.: 20748181.3**, published in Jan. 29, 2020. **EU Patent: 3832359**, published in March 22, 2023.

[I2] **Min Hyuk Kim**, Giljoo Nam, "METHOD FOR ACQUIRING THREE-DIMENSIONAL OBJECT BY USING ARTIFICIAL LIGHTING PHOTOGRAPH AND DEVICE THEREOF", EU Patent App.: 19813220.1, published in Dec. 11, 2019, **EU Patent: 3664039**, published in Jul. 12, 2023.

[I3] **Min Hyuk Kim**, Giljoo Nam, "Acquisition Method for 3D Objects Using Unstructured Flash Photography and Apparatus Therefor", US Patent App.: 16/622,234, published in Dec. 12, 2019, **US Patent: 11,380,056**, published in Jul. 05, 2022.

[I4] **Min Hyuk Kim**, Daniel S. Jeon, "Hyperspectral imaging spectroscopy method using kaleidoscope and system therefor", US Patent App.: 15/637,884, published in Jun. 29, 2017, **US Patent: 11,300,450**, published in Apr. 12, 2022.

[I5] **Min Hyuk Kim**, Seung-Hwan Baek, Incheol Kim, "Hyperspectral Imaging Reconstruction Method Using Prism and System Therefor", US Patent App.: 16/140,347, published in Sep. 24, 2018, **US Patent: 10,891,721, registered in Jan. 12, 2021.**

[I6] **Min Hyuk Kim**, In Chang Choi, "Method and Apparatus for Reconstructing Hyperspectral Image Using Artificial Intelligence", US Patent App.: 16/127,014, published in Sept. 10, 2018, **US Patent: 10,861,143, registered in Dec. 8, 2020.**

[I7]   **Min Hyuk Kim**, In Chang Choi, "Joint dictionary generation method for image processing, interlace-based high dynamic range imaging apparatus using joint dictionaries and image processing method of the same", US Patent App.: 15/980,456, published in May 15, 2018, **US Patent: 10,778,917, registered in Sept. 15, 2020.**

[I8]   **Min Hyuk Kim**, Seung-Hwan Baek, Incheol Kim, "Hyperspectral Imaging Reconstruction Method Using Prism and System Therefor", European Patent App.: 18196285.3, published in Sep. 24, 2018, **European/German Patent: 3460427, registered** in June 3, 2020.

[I9]   **Min Hyuk Kim**, Giljoo Nam, Joo Ho Lee, "Method and system for simultaneous measuring surface normal vector and surface reflectance function in microscale", US Patent App.: 15/427,821, published in Feb. 8, 2017, **US Patent: US 10,281,396 B2, registered** in May 7, 2019.

[I10] **Min Hyuk Kim**, Seung-Hwan Baek, "Method for estimating depth of image using birefringent medium with a camera and apparatus therefor", US Patent App. 15/236,911, published in Aug 15, 2016, **US Patent: US 10,217,233 B2, registered** in Feb. 26, 2019.

[I11] Patrick Paczkowski, Julie Dorsey, **Min Hyuk Kim**, Holly Rushmeier, "Systems and Methods for Sketching Designs in Context", US Patent App.: 13/551,879, published in Aug 29, 2013, **US Patent: US 9,149,309 B2, registered** in Oct. 6, 2015.

International Patent Applications: (12 applications)

[I12] **Min Hyuk Kim**, Yaldiz Mustafa Berk, Meuleman Andreas, "Method For End-To-End Generating And Recognizing Of Deformable Fiducial Markers Based On Artificial Intelligence And The System Thereof", **US Patent App.: 17/857,444**, published in Jul. 05, 2022.

[I13] **Min Hyuk Kim**, Joo Ho Lee, Hyunjin Ku, Dahyun Kang, Hyunho Ha, "Capturing spatially-varying reflectance functions using a mobile phone with a flash", , **PCT App.: PCT/KR2021/012283**, published in 2022-04-21.

[I14] **Min Hyuk Kim**, Andreas Meuleman, Hyeonjoong Jang, "Real-Time Omnidirectional Stereo Matching Method Using Multi-View Fisheye Lenses And System Therefore", **PCT App.: PCT/KR2022/004253**, published in 2022-01-05.

[I15] **Min Hyuk Kim**, Andreas Meuleman, Hyeonjoong Jang, "Real-Time Omnidirectional Stereo Matching Method Using Multi-View Fisheye Lenses And System Therefore", **European Patent Office App.: 22164170.7**, published in 2022-03-24.

[I16] **Min Hyuk Kim**, Andreas Meuleman, Hyeonjoong Jang, "Real-Time Omnidirectional Stereo Matching Method Using Multi-View Fisheye Lenses And System Therefore", **US Patent App.: 17/656,049**, published in 2022-03-23.

[I17] **Min Hyuk Kim**, Joo Ho Lee, Hyun Jin Ku, Dahyun Kang, Hyunho Ha, "Capturing spatially-varying reflectance functions using a mobile phone with a flash", **PCT Patent App.: PCT/KR2021/012283**, published in Sept. 9, 2021.

[I18] **Min Hyuk Kim**, Suk Jun Jeon, "Lensless Hyperspectral Imaging Method and Apparatus Therefore", **US Patent App.: 17/272,542**, published in Jan. 29, 2020.

[I19] **Min Hyuk Kim**, Suk Jun Jeon, "Lensless Hyperspectral Imaging Method and Apparatus Therefore", **PCT Patent App.: PCT/KR2020/001346**, published in Jan. 29, 2020.

[I20] **Min Hyuk Kim**, Giljoo Nam, "Acquisition Method for 3D Objects Using Unstructured Flash Photography and Apparatus Therefor", **PCT Patent App.: PCT/KR2019/013099**, published in Oct. 07, 2019.

[I21] **Min Hyuk Kim**, Seung-Hwan Baek, Incheol Kim, "Hyperspectral Imaging Reconstruction Method Using Prism and System Therefor", **PCT Patent App.: PCT/KR2018/011043**, published in Sep. 19, 2018.

[I22] **Min Hyuk Kim**, Joo Ho Lee, "Laplacian patch-based image synthesis method and apparatus therefor", **PCT Patent App.: PCT/KR2016/014769**, published in Dec. 16, 2016.

[I23] **Min Hyuk Kim**, Daniel S. Jeon, "Hyperspectral imaging spectroscopy method using kaleidoscope and system therefor", **PCT Patent App.: PCT/KR2016/014768**, published in Dec. 16, 2016.

Korean Patents Registered: (22 patents)

[K1] **Min Hyuk Kim**, Yaldiz Mustafa Berk, Meuleman Andreas, "Method For End-To-End Generating And Recognizing Of Deformable Fiducial Markers Based On Artificial Intelligence And The System Thereof", KR Patent App.: 10-2021-0088349, published in July 6, 2021, **KR Patent: 10-2620823, registered** on Dec.28, 2023.

[K2] **Min Hyuk Kim**, Meuleman Andreas, HyeonJoong Jang, "Real-Time Omnidirectional Stereo Matching Method Using Multi-View Fisheye Lenses And System Therefore", KR Patent App.: 10-2021-0038583, published in March 25, 2021, KR Patent App.: 10-2022-0018075, rebuilt in February 11, 2022. **KR Patent: 10-2587298, registered** on Dec. 5, 2023.

[K3] Ki-hun Jeong, Myoungsu Ahn, **Min Hyuk Kim**, Suk Jun Jeon, "Spectral Apparatus Incorporating Tunable Filters with Multiple Resonances, and Spectral Information Processing Method Thereof", KR Patent App.: 10-2020-0035039, published in March 23, 2020, **KR Patent: 10-2362278, registered** on February 8, 2022.

[K4] **Min Hyuk Kim**, Inchang Choi, "Joint dictionary generation method for image processing, interlace based high dynamic range imaging apparatus using the joint dictionary and image processing method of the same", KR Patent App.: 10-2017-0179052, published in December 26, 2017, **KR Patent: 10-2314703, registered** on October 13, 2021.

[K5] **Min Hyuk Kim**, HyeonJoong Jang, Hyunjin Ku, "Calibration Method for Real-Time Spherical 3D 360 Imaging and Apparatus Therefor", KR Patent App.: 10-2019-0084592, published in July 12, 2019, **KR Patent: 10-2295857, registered** on August 25, 2021.

[K6] **Min Hyuk Kim**, Giljoo Nam, "Acquisition Method for 3D Objects Using Unstructured Flash Photography and Apparatus Therefor", KR Patent App.: 10-2019-0120410, published in September 30, 2019, **KR Patent: 10-2287472, registered** on Aug. 3, 2021.

[K7] **Min Hyuk Kim**, Daniel S. Jeon, "Lensless Hyperspectral Imaging Method and Apparatus Therefore", KR Patent App.: 10-2019-0096565, published in August 8, 2019, **KR Patent: 10-2269229, registered** on Jun. 21, 2021.

[K8] **Min Hyuk Kim**, Seung-Hwan Baek, Andreas Meuleman "Method for Restoring Image for Birefractive Stereo and Apparatus Therefor", KR Patent App.: 10-2018-0137223, published in November 09, 2018, **KR Patent: 10-2209915, registered** on Jan. 26, 2021.

[K9] **Min Hyuk Kim**, Hyeonjoong Jang, "Real-Time Reconstruction Method of Polyhedron-Based 360 Imaging and Apparatus Therefor", KR Patent App.: 10-2019-0027956, published in March 12, 2019, **KR Patent: 10-2192347, registered** on Dec. 11, 2020.

[K10] **Min Hyuk Kim**, Seung-Hwan Baek, Incheol Kim, "Hyperspectral Imaging Reconstruction Method Using Prism and System Therefor", KR Patent App.: 10-2018-0077646, published in Jul. 04, 2018, **KR Patent: 10-2139858, registered** on Jul. 24, 2020

[K11] **Min Hyuk Kim**, Hyeonjoong Jang, Hyun Jin Ku, Inchang Choi "Real-Time Reconstruction Method of Spherical 3D 360 Imaging and Apparatus Therefor", KR Patent App.: 10-2018-0100996, published in August 28, 2018, **KR Patent: 10-2133090, registered** on May 13, 2020.

[K12] **Min Hyuk Kim**, Inchang Choi, "Hyperspectral Imaging Reconstruction Method Using Artificial Intelligence and Apparatus Therefor", KR Patent App.: 10-2018-0094253, published in August 13, 2018, **KR Patent: 10-2132075, registered** on July 02, 2020.

[K13] **Min Hyuk Kim**, Daniel Jeon, "Stereo Super-ResolutionImaging Method using Deep Convolutional Networks and Apparatus Therefor", KR Patent App.: 10-2018-0026275, published in March 5, 2018, **KR Patent: 10-2083721, registered** in Feb. 25.

[K14] **Min Hyuk Kim**, Daniel S. Jeon, "Hyperspectral Imaging Spectroscopy Method Using Kaleidoscope and System Therefor", KR Patent App.: 10-2016-0101653, published in August 10, 2016, and 10-2017-0046460, rebuilt in April 11, 2017, **KR Patent: 10-1915883, registered** on Oct. 31, 2018.

[K15] **Min Hyuk Kim**, Seung-Hwan Baek, "Method for estimating depth of image using birefringent medium with a camera and apparatus therefor", KR Patent App.: 10-2016-0081370, published in June 29, 2016, **KR Patent: 10-1915843, registered** on Oct. 31, 2018.

[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

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] **NVIDIA**, "Geometry-Aware Omnidirectional Imaging for Efficient Scene Understanding," Invited talk Jun. 16, 2024

[4] **University of Hong Kong**, "Self-Calibrating, Fully Differentiable NLOS Inverse Rendering," Workshop on Frontiers of Image Science and Visual Computing, Apr. 8, 2024

[5] **National Institute of Agricultural Sciences**, "Introduction to Advanced Hyperspectral Imaging Technology," Mar. 25, 2024

[6] **Samsung Display**, "Introduction to Computer Vision," Jul. 15–Sep. 2, 2022

[7] **Huawei Technologies Japan**, Tokyo Research Center, "Physics-based material estimation: Differentiable Acquisition of Appearance and 3D Geometry," in Digital Human Workshop, Dec. 13, 2021

[8] **China Society of Image and Graphics (CSIG)**, International Seminar on Differentiable Acquisition of Visual Information, "Differentiable Acquisition of Appearance & 3D Geometry," Oct. 23, 2021

[9] **Samsung Display**, "Introduction to Computer Vision," Apr. 7–Jun. 11, 2021

[10] **University of Seoul**, "Advanced Image-based Modeling for Capturing High-Fidelity SVBRDFs," Jan. 19, 2021

[11] **Huawei Technologies Japan**, Tokyo Research Center, "Advanced Image-based Modeling for Capturing High-Fidelity SVBRDFs," Mar. 27, 2020

[12] **Microsoft Research Asia (MSRA)**, Microsoft Research Asia Academic Day Workshop 2019, "Compact Snapshot Hyperspectral Imaging with Diffracted Rotation," Nov. 7–8, 2019

[13] **Beijing Institute of Technology (BIT)**, invited by Prof. Lizhi Wang, "Advanced Hyperspectral Imaging," Oct. 16, 2018

[14] **Microsoft Research Asia (MSRA)**, Beijing, invited by Dr. Xin Tong, "Advanced Hyperspectral Imaging," Oct. 15, 2018

[15] **University of Science and Technology of China (USTC)**, invited by Prof. Xuejin Chen, "Advanced Hyperspectral Imaging," July 30, 2018

[16] **University of Reims Champagne-Ardenne** in France, invited by Prof. Celine Loscos, "Advanced Hyperspectral Imaging," July 20, 2018

[17] **Imperial College London** in UK, invited by Prof. Abhijeet Ghosh, "Advanced Hyperspectral Imaging," July 16, 2018

[18] International Symposium on Computational Design & Engineering (ISCDE), Ho Chi Minh, Vietnam, "3D Imaging Foundations for Augmented Reality and Virtual Reality," (Tutorial) December 15, 2017

[19] Samsung Advanced Institute of Technology (SAIT), Suwon, Korea, "Capturing the Real World to Make Graphics Closer to Reality," August 30, 2017

[20] 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

[21] **Asia Faculty Summit of Microsoft Research**, Seoul, Korea, "Capturing the Real World to Make Graphics Closer to Reality," November 4, 2016

[22] NAVER Labs, Seongnam, Korea, "Closer to Reality: Capturing, Understanding and Interacting in Computer Graphics," Feb. 25, 2016

[23] Koh Young Technology, Seoul, Korea, "Introduction to 3D Imaging Based on Structured Lighting," Aug. 20, 2015

[24] Summer Conference of Society of CAD/CAM Engineers, Myongji University, Yongin-si, Korea, "Introduction to Hyperspectral 3D Imaging," Aug. 19, 2015

[25] ETRI (Electronics and Telecommunications Research Institute), Daejeon, Korea, "Introduction to Hyperspectral 3D Imaging," Jul. 28, 2015

[26] **Yale University**, Department of Computer Science, New Haven, **USA**, "Introduction to Hyperspectral 3D Imaging," Feb. 17, 2015

[27] **TECHNION**, KAIST–TECHNION Symposium, Haifa, **Israel**, "Advanced Imaging and Perception of Material Appearance," Dec. 07, 2014

[28] Kolon, Techno-Leadership Course, Daejeon, Korea, "Advanced 3D Imaging and Perception of Material Appearance," Jul. 19, 2014

[29] UNIST, School of Design and Human Engineering, Ulsan, Korea, "Advanced 3D Imaging and Perception of Material Appearance," May 20, 2014

[30] KAIST, Bio and Brain Engineering Department, Daejeon, Korea, "Advanced 3D Imaging and Perception of Material Appearance," April 16, 2014

[31] **National Tsing Hua University**, Asian Workshop on Smart Sensor System, Hualien, **Taiwan**, "Advanced Imaging and Perception of Material Appearance," March 21, 2014

[32] Koh Young Technology, Seoul, Korea, "Advanced 3D Imaging for Analyzing Materials," October 27, 2013

[33] POSTECH, Computer Science Department, Pohang, Korea, "Advanced Imaging and Perception of Material Appearance," October 2, 2013

[34] **Zhejiang University**, State Key Lab. of CAD & CG, Hangzhou, **China**, "High-Fidelity Acquisition and Representation in Graphics," July 16, 2013

[35] International Symposium on Ubiquitous Virtual Reality (ISUVR), Daejeon, Korea, "Visual Perception for High-Fidelity Representation in Graphics," July 12, 2013

[36] KOLON-KAIST LSI Center Colloquium, Daejeon, Korea, "High-Fidelity Color Representation in Computer Graphics," June 13, 2013

[37] KAIST CS & WebST Colloquium, Daejeon, Korea, "Visual Computing with Camera," June 10, 2013

[38] Center for Integrated Smart Sensor (CISS) Workshop, Daejeon, Korea, "Advanced Image Processing Techniques: 3D Photography," June 5, 2013

[39] LG Electronics, Software Platform R&D Lab., Seoul, Korea, "High Fidelity in Computer Graphics," May 22, 2013

[40] Center for Integrated Smart Sensor (CISS) Seminar, Daejeon, Korea, "Visual Computing in Computer Graphics," February 27, 2013

[41] Samsung Electronics, DMC R&D Center, Suwon, Korea, "The Future of the Camera," November 15, 2012

[42] KAIST, Computer Science Dept., Daejeon, Korea, "High-Fidelity Representation in Computer Graphics," November 2, 2011

[43] **Vision@UCL, London, UK,** "Modelling Human Colour Perception under Extended Luminance Levels," October 8, 2009

SUPERVISION

Current PhD Students:

[1] Hyunho Ha (하현호), real-time 4D scanning, March 2019–ongoing, PhD, KAIST, Korea

[2] Hyeonjoong Jang (장현중), 360 imaging, August 2019–ongoing, PhD, KAIST, Korea

[3] Shinyoung Yi (이신영), Polarimetric rendering, September 2020–ongoing, PhD, KAIST, Korea

[4] Inseung Hwang (황인승), Polarimetric imaging, March 2020–ongoing, PhD, KAIST, Korea

[5] Hakyeong Kim (김하경), learning-based 3D vision, March 2021–ongoing, PhD, KAIST, Korea

[6] Kiseok Choi (최기석), non-line-of-sight (NLOS) imaging, March 2021–ongoing, PhD, KAIST, Korea

[7] Donggun Kim (김동건), high-quality 3D scene reconstruction, March 2022–ongoing, PhD, KAIST, Korea

[8] Inchul Kim (김인철), Real-time 4D reflectance imaging, September 2022–ongoing, PhD, KAIST, Korea

[9] Hyeongjun Cho (조형준), 3D imaging, March 2023–ongoing, PhD, KAIST, Korea

[10] Jaemin Cho (조재민), 3D imaging, August 2023–ongoing, PhD, KAIST, Korea

[11] Jiwoong Na (나지웅), Dual-pixel imaging, March 2024–ongoing, PhD, KAIST, Korea

[12] Dongyoung Choi (최동영), Neural rendering, March 2024–ongoing, PhD, KAIST, Korea

[13] Sanghyeon Lee (이상현), Sensor fusion, September 2024–ongoing, PhD, KAIST, Korea

Current MS Students:

[14] Seungmin Hwang (황승민), Hyperspectral imaging, March 2023–ongoing, MS, KAIST, Korea

[15] Seeha Lee (이시하), HDR imaging, March 2023–ongoing, MS, KAIST, Korea

[16] Yeonwoo Lim (임연우), Hyperspectral imaging, March 2024–ongoing, MS, KAIST, Korea

[17] Yejoon Kwon (권예준), 3D imaging, March 2024–ongoing, MS, KAIST, Korea

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

Supervised PhDs:

[1] 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**

[2] Daniel S. Jeon (전석준), *Physically-based Phasor Imaging for Advanced Scene Understanding*, September 2016–February 2023, PhD, KAIST, Korea
(Current position) **Research Scientist, AMD, Korea**

[3] 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**

[4] 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**

[5] 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**

[6]   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:

[7]   Sanghyeon Lee (이상현), *Multi-Lane Detection and Tracking using Temporally-Recursive Catmull-Rom Splines*, September 2022–September 2024, MS, KAIST, Korea

[8]   Jiwoong Na (나지웅), *Developing an HDR 3D Imaging Algorithm for an Ultra-thin Light-Field Camera*, March 2022–February 2024, MS, KAIST, Korea

[9]   Dongyoung Choi (최동영), *OmniLocalRF: Omnidirectional Local Radiance Fields from Dynamic Videos*, March 2022–February 2024, MS, KAIST, Korea

[10]   Jaemin Cho (조재민), *Physically-Based Neural Rendering of Multiplane Images*, August 2021–August 2023, MS, KAIST, Korea

[11]   Hyeongjun Cho (조형준), *Multiview Phase-Measuring Profilometry Calibration using a Static Target*, March 2020–March 2023, MS, KAIST, Korea

[12]   Jung Woo Kim (김정우), *Demosaicing a Time-Varying Exposures Array for Snapshot HDR Imaging*, March 2021–February 2023, MS, KAIST, Korea

[13]   Mustafa Yaldiz, *Representation Learning-Based Image Restoration for High-Performance Computational Imaging*, March 2020–August 2022, MS, KAIST, Korea

[14]   Donggun Kim (김동건), *Real-time image restoration of sub-aperture images for ultra-thin light field cameras*, September 2020–February 2022, MS, KAIST, Korea

[15]   Hyunjin Ku (구현진), *Practical SVBRDF Acquisition of 3D Objects from Single-View RGB-D Images*, March 2019–February 2021, MS, KAIST, Korea

[16]   Hakyeong Kim (김하경), *High-Quality Stereo Image Restoration from Double Refraction*, March 2019–February 2021, MS, KAIST, Korea

[17]   Dahyun Kang (강다현), *View-dependent Scene Appearance Synthesis using Inverse Rendering from Light Fields*, March 2019–February 2021, MS, KAIST, Korea

[18]   Shinyoung Yi (이신영), *Modeling Surround-Aware Contrast Sensitivity for HDR Applications*, March 2018–August 2020, MS, KAIST, Korea

[19]   Inseung Hwang (황인승), *Single-shot Acquisition of Cylindrical Mesostructure Normals using Diffuse Illumination*, March 2018–February 2020, MS, KAIST, Korea

[20]   Hyeonjoong Jang (장현중), *Fast Omnidirectional Depth Densification*, August 2017–August 2019, MS, KAIST, Korea

[21]   Hyunho Ha (하현호), *Dynamic Acquisition of SVBRDF, Geometry and Motion Using a Single RGBD Camera*, March 2017–February 2019, MS, KAIST, Korea

[22]   Yeong Beum Lee (이영범), *Integrated Calibration of Mutliview Phase-Measuring Profilometry*, April 2014–February 2018, MS, KAIST, Korea

[23]   Mingyun Kang (강민균), *Real-Time HDR Video Tone Mapping for High Efficiency Video Coding*, March 2016–February 2018, MS, KAIST, Korea

[24]   Incheol Kim (김인철), *Dehazing using Non-Local Regularization with Iso-Depth Neighbor-Fields*, March 2015–February 2017, MS, KAIST, Korea

[25]   Daniel S. Jeon (전석준), *Multisampling Compressive Video Spectroscopy*, July 2014–August 2016, MS, KAIST, Korea

[26]   Haebom Lee (이해봄), *Building a Two-Way Hyperspectral Imaging System with Liquid Crystal Tunable Filters*, September 2014–August 2015, MS, KAIST, Korea

[27]   Seung-Hwan Baek (백승환), *Stereo Fusion using a Refractive Medium on a Binocular Base*, April 2013–February 2015, MS, KAIST, Korea

[28] Giljoo Nam (남길주), *Developing a Multispectral Photometric Stereo System for Acquiring High-Fidelity Surface Normals*, September 2012–August 2014, MS, KAIST, Korea

[29] Joo Ho Lee (이주호), *Locally Adaptive Products for Genuine Spherical Harmonic Lighting*, September 2012–August 2014, MS, KAIST, Korea

Supervised Students in Other Universities:

[30] Andréas Meuleman, *Birefractive stereo imaging*, December 2017–August 2018, MS, INSA-Rouen, France

[31] Antoine Nicole, *Visualizing dynamic computer graphics models*, December 2017–August 2018, MS, UTBM, France

[32] Lou Kramer, *Estimating BRDF from light field*, September 2016–August 2017, MS, Technical University of Munich (TUM), Germany

[33] Patrick Paczkowski, 3D modeling, December 2010–2017, PhD, co-supervised with Prof. Julie Dorsey, Yale University, USA

TEACHING

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

[1] CS380 (2025 Spring): Introduction to Computer Graphics (Eval.: /5.00)

[2] CS484 (2024 Fall): Introduction to Computer Vision (Eval.: 4.55/5.00)

[3] CS101 (2024 Spring): Introduction to Programming (Eval.: 4.35/5.00)

[4] CS484 (2023 Fall): Introduction to Computer Vision (Eval.: 4.37/5.00)

[5] CS580 (2023 Spring): Interactive Computer Graphics (Eval.: 4.58/5.00)

[6] CS101 (2023 Spring): Introduction to Programming (Eval.: 4.35/5.00)

[7] CS484 (2022 Fall): Introduction to Computer Vision (Eval.: 4.09/5.00)

[8] CS482 (2022 Fall): Interactive Computer Graphics (Eval.: 4.16/5.00)

[9] CS101 (2022 Spring): Introduction to Programming (Eval.: 4.39/5.00)

[10] CS484 (2021 Fall): Introduction to Computer Vision (Eval.: 4.49/5.00)

[11] CS380 (2021 Spring): Introduction to Computer Graphics (Eval.: 4.50/5.00)

[12] CS101 (2021 Spring): Introduction to Programming (C/D) (Eval.: 4.40/5.00)

[13] CS484 (2020 Fall): Introduction to Computer Vision (Eval.: 4.26/5.00)

[14] CS482 (2020 Spring): Computer Graphics (Eval.: 4.05/5.00)

[15] CS482 (2019 Fall): Interactive Computer Graphics (Eval.: 4.53/5.00)

[16] CS484 (2019 Fall): Introduction to Computer Vision (Eval.: 4.25/5.00)

[17] CS576 (2019 Spring): Computer Vision (Eval.: 3.96/5.00)

[18] CS484 (2018 Fall): Introduction to Computer Vision (Eval.: 4.00/5.00)

[19] CS380 (2018 Spring): Introduction to Computer Graphics (Eval.: 4.64/5.00)

[20] CS681 (2017 Fall): Computational Colorimetry (Eval.: 4.75/5.00)

[21] CS580 (2017 Spring): Computer Graphics (Eval.: 4.07/5.00)

[22] CS101 (2017 Spring): Introduction to Programming (Eval.: 4.57/5.00)

[23] CS482 (2016 Fall): Interactive Computer Graphics (Eval.: 4.32/5.00)

[24] COE203 (2016 Fall): Design Project for IT Convergence (Eval.: 5.00/5.00)

[25] CS101 (2016 Spring): Introduction to Programming (C/D) (Eval.: 4.18/5.00)

[26] CS681 (2015 Fall): Computational Colorimetry (Eval.: 4.60/5.00)

[27] COE203 (2015 Fall): Design Project for IT Convergence (Eval.: 3.84/5.00)

[28] CS101 (2015 Spring): Introduction to Programming (G/H) (Eval.: 4.16/5.00)

[29] CS380 (2015 Spring): Introduction to Computer Graphics (Eval.: 4.22/5.00)