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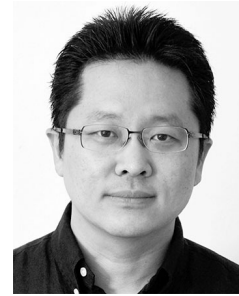
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APPOINTMENTS

08/2012– Present **KAIST, Korea, Professor of Computer Science**

– Research areas: **Computer Graphics and Vision**

(Computational Photography, Spectral Imaging, 3D Imaging, Reflectance Imaging, Visual Perception)

– 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

- **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 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) 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**
- **ACM SIGGRAPH (General Submission) 2014, 2015**
- **ACM SIGGRAPH Asia (Technical Paper) 2017, 2018, 2020**
- **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**
- **IEEE Int. Conf. on Computer Vision (ICCV) 2019**
- **ASIAGRAPHICS (Executive Committee) 2022**
- **IEEE Int. Conf. on Computational Photography (ICCP) 2021, 2022**
- **Asian Conf. on Computer Vision (ACCV) 2020**
- **Conference on Artificial Intelligence (AAAI) 2020, 2021, 2022**
- **Eurographics (EG) 2018, 2019**
- **Eurographics Symposium on Rendering (EGSR) 2021, 2022**
- **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 Visualization and Computer Graphics (TVCG)**, since Jan. 2022
- **Associate Editor, ACM Transactions on Applied Perception (TAP)**, since Jul. 2016
- Associate Editor, Journal of Computational Design and Engineering (JCDE), since Mar. 2020
- **Associate Editor, ACM Transactions on Graphics (TOG)**, Jul. 2014 – Aug. 2017 (3-year term)
- **Associate Editor, IEEE Transactions on Computational Imaging (TCI)**, Oct. 2020 – Jun. 2022
- **Associate Editor, Elsevier Computers and Graphics (CAG)**, Aug. 2016 – Jul. 2022

PUBLICATIONS

[TOP CONF./TOTAL PUB.: 35/79 (J. 35, C. 44), TOTAL IF: 170.466]

Top Conferences/Journals (SIGGRAPH/SIGGRAPH Asia) in Computer Graphics[§]: (19 papers)

- [J1] 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=5.414**)
- [J2] 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=5.414**)
- [J3] 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=5.414**)
- [J4] 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=5.414**)
- [J5] 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**)
- [J6] 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*

[§]**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**.

- on Graphics (**ACM TOG**), 38(4), presented at **SIGGRAPH** 2019, July 28–August 1, 2019, pp. 117:1–13 (**SCI-IF=5.414**)
- [J7] 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=5.414**)
- [J8] 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=5.414**)
- [J9] 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=5.414**)
- [J10] 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=5.414**)
- [J11] 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=5.414**)
- [J12] 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=5.414**)
- [J13] 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=5.414**)
- [J14] 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=5.414**)
- [J15] **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=5.414**)
- [J16] 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=5.414**)
- [J17] **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=5.414**)
- [J18] **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=5.414**)
- [J19] 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=5.414**)

Top Conferences (CVPR/ICCV/ECCV) in Computer Vision*: (16 papers)

- [C1] 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
- [C2] Donghun Kang, Hyeonjoong Jang, Jungeon Lee, Chong-Min Kyung, **Min H. Kim** (2022) “Uniform Sub-division 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
- [C3] 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
- [C4] 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
- [C5] Hakyong 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
- [C6] 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
- [C7] 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
- [C8] 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
- [C9] 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
- [C10] 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
- [C11] 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
- [C12] 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
- [C13] 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

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

[C14] 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

[C15] 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

[C16] 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)

[C17] 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:

[J20] 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=3.49**)

[J21] 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=2.078**)

[J22] 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**)

[J23] 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=4.579**)

[J24] 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=17.782**)

[J25] 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=10.856**)

[J26] 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=4.836**)

[J27] 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=3.876**)

[J28] 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=2.078**)

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

- [J29] 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=2.645**)
- [J30] 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=4.016**)
- [J31] 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=2.088**)
- [J32] **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 (**SCIE-IF=2.020**)
- [J33] 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=1.550**)
- [J34] 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=1.550**)
- [J35] **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= 2.078**)

Other International Conference Proceedings:

- [C18] 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
- [C19] 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
- [C20] 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
- [C21] Dahyun Kang, Daniel S. Jeon, Hakyong 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
- [C22] 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
- [C23] 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
- [C24] 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

- [C25] 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
- [C26] 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
- [C27] 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
- [C28] 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
- [C29] 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
- [C30] Incheol Kim, **Min H. Kim** (2017) “Dehazing using Non-Local Regularization with Iso-Depth Neighborhoods,” 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
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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] **Samsung Display**, “Introduction to Computer Vision,” Jul. 15–Sep. 2, 2022
- [4] **Huawei Technologies Japan**, Tokyo Research Center, “Physics-based material estimation: Differentiable Acquisition of Appearance and 3D Geometry,” in Digital Human Workshop, Dec. 13, 2021
- [5] **China Society of Image and Graphics (CSIG)**, International Seminar on Differentiable Acquisition of Visual Information, “Differentiable Acquisition of Appearance & 3D Geometry,” Oct. 23, 2021
- [6] **Samsung Display**, “Introduction to Computer Vision,” Apr. 7–Jun. 11, 2021
- [7] **University of Seoul**, “Advanced Image-based Modeling for Capturing High-Fidelity SVBRDFs,” Jan. 19, 2021
- [8] **Huawei Technologies Japan**, Tokyo Research Center, “Advanced Image-based Modeling for Capturing High-Fidelity SVBRDFs,” Mar. 27, 2020

- [9] **Microsoft Research Asia (MSRA)**, Microsoft Research Asia Academic Day Workshop 2019, “Compact Snapshot Hyperspectral Imaging with Diffracted Rotation,” Nov. 7–8, 2019
- [10] **Beijing Institute of Technology (BIT)**, invited by Prof. Lizhi Wang, “Advanced Hyperspectral Imaging,” Oct. 16, 2018
- [11] **Microsoft Research Asia (MSRA)**, Beijing, invited by Dr. Xin Tong, “Advanced Hyperspectral Imaging,” Oct. 15, 2018
- [12] **University of Science and Technology of China (USTC)**, invited by Prof. Xuejin Chen, “Advanced Hyperspectral Imaging,” July 30, 2018
- [13] **University of Reims Champagne-Ardenne** in France, invited by Prof. Celine Loscos, “Advanced Hyperspectral Imaging,” July 20, 2018
- [14] **Imperial College London** in UK, invited by Prof. Abhijeet Ghosh, “Advanced Hyperspectral Imaging,” July 16, 2018
- [15] International Symposium on Computational Design & Engineering (ISCDE), Ho Chi Minh, Vietnam, “3D Imaging Foundations for Augmented Reality and Virtual Reality,” (Tutorial) December 15, 2017
- [16] Samsung Advanced Institute of Technology (SAIT), Suwon, Korea, “Capturing the Real World to Make Graphics Closer to Reality,” August 30, 2017
- [17] 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
- [18] **Asia Faculty Summit of Microsoft Research**, Seoul, Korea, “Capturing the Real World to Make Graphics Closer to Reality,” November 4, 2016
- [19] NAVER Labs, Seongnam, Korea, “Closer to Reality: Capturing, Understanding and Interacting in Computer Graphics,” Feb. 25, 2016
- [20] Koh Young Technology, Seoul, Korea, “Introduction to 3D Imaging Based on Structured Lighting,” Aug. 20, 2015
- [21] Summer Conference of Society of CAD/CAM Engineers, Myongji University, Yongin-si, Korea, “Introduction to Hyperspectral 3D Imaging,” Aug. 19, 2015
- [22] ETRI (Electronics and Telecommunications Research Institute), Daejeon, Korea, “Introduction to Hyperspectral 3D Imaging,” Jul. 28, 2015
- [23] **Yale University**, Department of Computer Science, New Haven, **USA**, “Introduction to Hyperspectral 3D Imaging,” Feb. 17, 2015
- [24] **TECHNION**, KAIST–TECHNION Symposium, Haifa, **Israel**, “Advanced Imaging and Perception of Material Appearance,” Dec. 07, 2014
- [25] Kolon, Techno-Leadership Course, Daejeon, Korea, “Advanced 3D Imaging and Perception of Material Appearance,” Jul. 19, 2014
- [26] UNIST, School of Design and Human Engineering, Ulsan, Korea, “Advanced 3D Imaging and Perception of Material Appearance,” May 20, 2014
- [27] KAIST, Bio and Brain Engineering Department, Daejeon, Korea, “Advanced 3D Imaging and Perception of Material Appearance,” April 16, 2014
- [28] **National Tsing Hua University**, Asian Workshop on Smart Sensor System, Hualien, **Taiwan**, “Advanced Imaging and Perception of Material Appearance,” March 21, 2014
- [29] Koh Young Technology, Seoul, Korea, “Advanced 3D Imaging for Analyzing Materials,” October 27, 2013
- [30] POSTECH, Computer Science Department, Pohang, Korea, “Advanced Imaging and Perception of Material Appearance,” October 2, 2013
- [31] **Zhejiang University**, State Key Lab. of CAD & CG, Hangzhou, **China**, “High-Fidelity Acquisition and Representation in Graphics,” July 16, 2013
- [32] International Symposium on Ubiquitous Virtual Reality (ISUVR), Daejeon, Korea, “Visual Perception for High-Fidelity Representation in Graphics,” July 12, 2013

- [33] KOLON-KAIST LSI Center Colloquium, Daejeon, Korea, “High-Fidelity Color Representation in Computer Graphics,” June 13, 2013
- [34] KAIST CS & WebST Colloquium, Daejeon, Korea, “Visual Computing with Camera,” June 10, 2013
- [35] Center for Integrated Smart Sensor (CISS) Workshop, Daejeon, Korea, “Advanced Image Processing Techniques: 3D Photography,” June 5, 2013
- [36] LG Electronics, Software Platform R&D Lab., Seoul, Korea, “High Fidelity in Computer Graphics,” May 22, 2013
- [37] Center for Integrated Smart Sensor (CISS) Seminar, Daejeon, Korea, “Visual Computing in Computer Graphics,” February 27, 2013
- [38] Samsung Electronics, DMC R&D Center, Suwon, Korea, “The Future of the Camera,” November 15, 2012
- [39] KAIST, Computer Science Dept., Daejeon, Korea, “High-Fidelity Representation in Computer Graphics,” November 2, 2011
- [40] **Vision@UCL, London, UK**, “Modelling Human Colour Perception under Extended Luminance Levels,” October 8, 2009

SUPERVISION

Current PhD Students:

- [1] Daniel S. Jeon (전석준), time-of-flight (TOF) imaging, September 2016–ongoing, PhD, KAIST, Korea
- [2] Hyunho Ha (하현호), real-time 4D scanning, March 2019–ongoing, PhD, KAIST, Korea
- [3] Hyeonjoong Jang (장현중), 360 imaging, August 2019–ongoing, PhD, KAIST, Korea
- [4] Andreas Meuleman, high-quality RGBD imaging, March 2020–ongoing, PhD, KAIST, Korea
- [5] Inseung Hwang (황인승), Polarimetric imaging, March 2020–ongoing, PhD, KAIST, Korea
- [6] Shinyoung Yi (이신영), transient imaging, September 2020–ongoing, PhD, KAIST, Korea
- [7] Hakyeong Kim (김하경), learning-based 3D vision, March 2021–ongoing, PhD, KAIST, Korea
- [8] Kiseok Choi (최기석), non-line-of-sight (NLOS) imaging, March 2021–ongoing, PhD, KAIST, Korea
- [9] Donggun Kim (김동건), high-quality 3D scene reconstruction, March 2022–ongoing, PhD, KAIST, Korea
- [10] Inchul Kim (김인철), Real-time 4D reflectance imaging, September 2022–ongoing, PhD, KAIST, Korea

Current MS Students:

- [11] Hyeongjun Cho (조형준), 3D imaging, March 2020–ongoing, MS, KAIST, Korea
- [12] Jung Woo Kim (김정우), Computational imaging, March 2021–ongoing, MS, KAIST, Korea
- [13] Jaemin Cho (조재민), 3D imaging, August 2021–ongoing, MS, KAIST, Korea
- [14] Jiwoong Na (나지웅), Dual-pixel imaging, March 2022–ongoing, MS, KAIST, Korea
- [15] Dongyoung Choi (최동영), Neural rendering, March 2022–ongoing, MS, KAIST, Korea
- [16] Sanghyeon Lee (이상현), Sensor fusion, September 2022–ongoing, MS, KAIST, Korea

Supervised PhDs:

- [1] 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**
- [2] Giljoo Nam (남길주), *Image-based Modeling for High-quality 3D Geometry and Reflectance*, September 2015–August 2019, PhD, KAIST, Korea
(Current position) **Research Scientist, Facebook Reality Labs, Pittsburgh, PA, United States**
- [3] Inchang Choi (최인창), *Learning-Based Image Reconstruction for Computational Photography*, February 2012–February 2019, PhD, KAIST, Korea
(Current position) **Research Scientist, SenseBrain, San Jose, CA, United States**

- [4] 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:

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

Supervised Students in Other Universities:

- [22] Andréas Meuleman, *Birefractive stereo imaging*, December 2017–August 2018, MS, INSA-Rouen, France
- [23] Antoine Nicole, *Visualizing dynamic computer graphics models*, December 2017–August 2018, MS, UTBM, France
- [24] Lou Kramer, *Estimating BRDF from light field*, September 2016–August 2017, MS, Technical University of Munich (TUM), Germany
- [25] 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] | CS484 (2022 Fall): Introduction to Computer Vision | (Eval.: /5.00) |
| [2] | CS482 (2022 Fall): Interactive Computer Graphics | (Eval.: /5.00) |
| [3] | CS101 (2022 Spring): Introduction to Programming | (Eval.: 4.39/5.00) |
| [4] | CS484 (2021 Fall): Introduction to Computer Vision | (Eval.: 4.49/5.00) |
| [5] | CS380 (2021 Spring): Introduction to Computer Graphics | (Eval.: 4.50/5.00) |
| [6] | CS101 (2021 Spring): Introduction to Programming (C/D) | (Eval.: 4.40/5.00) |
| [7] | CS484 (2020 Fall): Introduction to Computer Vision | (Eval.: 4.26/5.00) |
| [8] | CS482 (2020 Spring): Computer Graphics | (Eval.: 4.05/5.00) |
| [9] | CS482 (2019 Fall): Interactive Computer Graphics | (Eval.: 4.53/5.00) |
| [10] | CS484 (2019 Fall): Introduction to Computer Vision | (Eval.: 4.25/5.00) |
| [11] | CS576 (2019 Spring): Computer Vision | (Eval.: 3.96/5.00) |
| [12] | CS484 (2018 Fall): Introduction to Computer Vision | (Eval.: 4.00/5.00) |
| [13] | CS380 (2018 Spring): Introduction to Computer Graphics | (Eval.: 4.64/5.00) |
| [14] | CS681 (2017 Fall): Computational Colorimetry | (Eval.: 4.75/5.00) |
| [15] | CS580 (2017 Spring): Computer Graphics | (Eval.: 4.07/5.00) |
| [16] | CS101 (2017 Spring): Introduction to Programming | (Eval.: 4.57/5.00) |
| [17] | CS482 (2016 Fall): Interactive Computer Graphics | (Eval.: 4.32/5.00) |
| [18] | COE203 (2016 Fall): Design Project for IT Convergence | (Eval.: 5.00/5.00) |
| [19] | CS101 (2016 Spring): Introduction to Programming (C/D) | (Eval.: 4.18/5.00) |
| [20] | CS681 (2015 Fall): Computational Colorimetry | (Eval.: 4.60/5.00) |
| [21] | COE203 (2015 Fall): Design Project for IT Convergence | (Eval.: 3.84/5.00) |
| [22] | CS101 (2015 Spring): Introduction to Programming (G/H) | (Eval.: 4.16/5.00) |
| [23] | CS380 (2015 Spring): Introduction to Computer Graphics | (Eval.: 4.22/5.00) |
| [24] | ITC203 (2014 Fall): Design Project for IT Convergence | (Eval.: 4.43/5.00) |
| [25] | CS101 (2014 Fall): Introduction to Programming (G/H) | (Eval.: 4.23/5.00) |
| [26] | CS681 (2014 Fall): Computational Colorimetry | (Eval.: 4.08/5.00) |
| [27] | CS580 (2014 Spring): Computer Graphics | (Eval.: 4.48/5.00) |
| [28] | CS492B (2013 Fall): Intermediate Computer Graphics | (Eval.: 4.52/5.00) |
| [29] | CS101 (2013 Spring): Introduction to Programming (K/L) | (Eval.: 4.10/5.00) |
| [30] | CS780 (2012 Fall): Computational Colorimetry | (Eval.: 4.89/5.00) |