

## Pieter Peers

Computer Science Department,  
College of William & Mary  
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USA

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## Professional Experience

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- Associate Professor** 2016 - present
  - Computer Science Department,  
College of William & Marry
- John and Audrey Leslie Associate Professor in Computer Science** 2020 - 2023
  - Computer Science Department,  
College of William & Marry
- Visiting Researcher** Aug-Sept 2016, Dec 2016, 2018, 2019
  - Microsoft Research Asia
- Assistant Professor** 2010 - 2016
  - Computer Science Department,  
College of William & Marry
- Assistant Research Professor** 2009 - 2010
  - University of Southern California (USC)
- Senior Researcher** 2006 - 2010
  - Graphics Lab, University of Southern California, Institute for  
Creative Technologies (ICT/USC)

## Education

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- **Katholieke Universiteit Leuven (K.U.Leuven)**, Leuven, Belgium August 2006  
Ph.D. in Engineering: Computer Science (Computer Graphics).
- **Katholieke Universiteit Leuven (K.U.Leuven)**, Leuven, Belgium September 2000  
Licentiaat Informatica, (Master in Informatics).

## Publications

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- **Books and Theses**
  - (B1) *Pieter Peers*, “Sampling Reflectance Functions for Image-based Relighting”, *Ph.D. thesis*, K.U.Leuven, August 22, 2006. 212+ix pages, ISBN 90-5682-735-9.
- **Journal Publications**<sup>1</sup>
  - (J1) Wenjie Ye, Yue Dong, *Pieter Peers*, and Baining Guo, “Deep Reflectance Scanning: Recovering Spatially-varying Material Appearance from a Flash-lit Video Sequence”, *Computer Graphics Forum*, Volume 40, Issue 6, September 2021.

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<sup>1</sup> Includes 21 ACM Transactions on Graphics publications (of which 10 SIGGRAPH, and 8 SIGGRAPH Asia), and 4 ACM SIGGRAPH (Asia) Conference papers, which is the leading journal/conference for computer graphics and interactive techniques.

- (J2) Victoria L. Cooper, James C. Bieron, and *Pieter Peers*, “Estimating Homogeneous Data-driven BRDF Parameters from a Reflectance Map under Known Natural Lighting”, *IEEE Trans. Vis. and Comp. Graph.*, June 2021.
- (J3) Duan Gao, Guojun Chen, Yue Dong, *Pieter Peers*, and Xin Tong, “Deferred Neural Lighting: Free-Viewpoint Relighting from Unstructured Photographs”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH 2020)*, Volume 39, Issue 6.
- (J4) Zhoaliang Duan, James C. Bieron and *Pieter Peers*, “Deep Separation of Direct and Global Components from a Single Photograph under Structured Lighting”, *Computer Graphics Forum*, Volume 39, Issue 7, October 2020.
- (J5) James C. Bieron and *Pieter Peers*, “An Adaptive BRDF Fitting Metric”, *Computer Graphics Forum*, Volume 39, Issue 4, July 2020.
- (J6) Wenjie Ye, Yue Dong, and *Pieter Peers*, “Interactive Curation of Datasets for Training and Refining Generative Models”, *Computer Graphics Forum*, Volume 38, Issue 7, October 2019.
- (J7) Yinming Lin, *Pieter Peers*, and Abhijeet Ghosh, “On-Site Example-Based Material Appearance Acquisition”, *Computer Graphics Forum*, Volume 38, Issue 4, July 2019.
- (J8) Duan Gao, Xiao Li, Yue Dong, *Pieter Peers*, and Xin Tong, “Deep Inverse Rendering for High-resolution SVBRDF Estimation from an Arbitrary Number of Images”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH 2019)*, Volume 38, Issue 4.
- (J9) Wenjie Ye, Xiao Li, Yue Dong, *Pieter Peers*, and Xin Tong, “Single Photograph Appearance Modeling with Self-augmented CNNs and Inexact Supervision”, *Computer Graphics Forum*, Volume 37, Issue 7, October 2018.
- (J10) Xiao Li, Yue Dong, *Pieter Peers*, and Xin Tong, “Modeling Surface Appearance from a Single Photograph using Self-augmented Convolutional Neural Networks”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH 2017)*, Volume 36, Issue 4, July 2017.
- (J11) Rui Xia, Yue Dong, *Pieter Peers*, and Xin Tong, “Recovering Shape and Spatially-Varying Surface Reflectance under Unknown Illumination”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH Asia 2016)*, Volume 35, Issue 6, December 2016.
- (J12) J  r  my Riviere, *Pieter Peers*, Abhijeet Ghosh, “Mobile Surface Reflectometry”, *Computer Graphics Forum*, Volume 35, Issue 1, February 2016.
- (J13) Bo Dong, Yue Dong, Xin Tong, and *Pieter Peers*, “Measurement-based Editing of Diffuse Albedo with Consistent Interreflections”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH 2015)*, Volume 34, Issue 4, Article 112, August 2015.
- (J14) Han Li, and *Pieter Peers*, “Reflectance Transfer: Example-Based Radiometric Linearization of Photographs”, *Computer Graphics Forum*, Volume 34, Issue 4, June 2015.
- (J15) Yue Dong, Guojun Chen, *Pieter Peers*, Jiawan Zhang, and Xin Tong, “Appearance-from-Motion: Recovering Spatially Varying Surface Reflectance Under Unknown Lighting”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH Asia 2014)*, Volume 33, Issue 6, Article 193, December 2014.
- (J16) Guojun Chen, Yue Dong, *Pieter Peers*, Jiawan Zhang, and Xin Tong, “Reflectance Scanning: Estimating Shading Frame and BRDF with Generalized Linear Light Sources”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH 2014)*, Volume 33, Issue 4, Article 117, August 2014.
- (J17) Adam Brady, Jason Lawrence, *Pieter Peers*, and Westley Weimer, “genBRDF: Discovering New Analytic BRDFs with Genetic Programming”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH 2014)*, Volume 33, Issue 4, Article 114, August 2014.
- (J18) Johannes Kopf, Ariel Shamir, and *Pieter Peers*, “Content-adaptive Image Downscaling”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH Asia 2013)*, Volume 32, Issue 6, Article 173, December 2013.

- (J19) Kathleen D. Moore, and Pieter Peers, “An Empirical Study on the Effects of Translucency on Photometric Stereo”, *The Visual Computer*, Volume 29, Issue 6-8, Pages 817–824, June 2013.
- (J20) Yufeng Zhu, Pradeep Garigipati, Pieter Peers, Paul Debevec, and Abhijeet Ghosh, “Estimating Diffusion Parameters from Polarized Spherical Gradient Illumination”, *IEEE Computer Graphics & Applications – Special Issue on “Scattering, Acquisition, Modeling, and Rendering”*, Volume 33, Issue 3, pages 34–43, June 2013.
- (J21) Hao Li, Linjie Luo, Daniel Vlasic, Pieter Peers, Jovan Popović, Mark Pauly, and Szymon Rusinkiewicz, “Temporally Coherent Completion of Dynamic Shapes”, *ACM Transactions on Graphics (TOG)*, Volume 31, Issue 1, Article 2, January 2012.
- (J22) Guojun Chen, Pieter Peers, Jiawan Zhang, and Xin Tong, “Real-time Rendering of Deformable Heterogeneous Translucent Objects using Multiresolution Splatting”, *The Visual Computer*, Volume 28, Numbers 6-8, pages 701–711, April, 2012.
- (J23) Abhijeet Ghosh, Tongbo Chen, Pieter Peers, Cyrus A. Wilson, and Paul Debevec, “Circularly Polarized Spherical Illumination Reflectometry”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH Asia)*, Volume 30, Issue 5, Article 5, December 2010.
- (J24) Cyrus A. Wilson, Abhijeet Ghosh, Pieter Peers, Jen-Yuan Chiang, Jay Busch, and Paul Debevec, “Temporal Upsampling of Performance Geometry using Photometric Alignment”, *ACM Transactions on Graphics (TOG)*, Volume 29, Issue 2, Article 17, March 2010.
- (J25) Daniel Vlasic, Pieter Peers, Ilya Baran, Paul Debevec, Jovan Popović, Szymon Rusinkiewicz, and Wojciech Matusik, “Dynamic Shape Reconstruction using Multi-View Photometric Stereo”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH Asia 2009)*, Volume 28, Issue 5, Article 174, December 2009.
- (J26) Ying Song, Xin Tong, Fabio Pellacini, and Pieter Peers, “SubEdit: A Representation for Editing Measured Heterogeneous Subsurface Scattering”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH 2009)*, Volume 28, Issue 3, Article 31, August 2009.
- (J27) Tim Weyrich, Pieter Peers, Wojciech Matusik, and Szymon Rusinkiewicz, “Fabricating Microgeometry for Custom Surface Reflectance”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH 2009)*, Volume 28, Issue 3, Article 32, August 2009.
- (J28) Abhijeet Ghosh, Tongbo Chen, Pieter Peers, Cyrus A. Wilson, and Paul Debevec, “Estimating Specular Roughness and Anisotropy from Second Order Spherical Gradient Illumination”, *Computer Graphics Forum (Proceedings of the Eurographics Symposium on Rendering)*, Volume 28, Issue 4, pages 1161–1170, June 2009.
- (J29) Pieter Peers, Dhruv K. Mahajan, Bruce Lamond, Abhijeet Ghosh, Wojciech Matusik, Ravi Ramamoorthi, and Paul Debevec, “Compressive Light Transport Sensing”, *ACM Transactions on Graphics (TOG)*, Volume 28, Issue 1, Article 3, January 2009.
- (J30) Abhijeet Ghosh, Tim Hawkins, Pieter Peers, Sune Frederiksen, and Paul Debevec, “Practical Modeling and Acquisition of Layered Facial Reflectance”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH Asia 2008)*, Volume 27, Issue 5, Article 139, December 2008.
- (J31) Wan-Chun Ma, Andrew Jones, Jen-Yuan Chiang, Tim Hawkins, Sune Frederiksen, Pieter Peers, Marko Vukovic, Ming Ouhyoung, and Paul Debevec, “Facial Performance Synthesis using Deformation-driven Polynomial Displacement Maps”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH Asia 2008)*, Volume 27, Issue 5, Article 121, December 2008.
- (J32) Pieter Peers, Naoki Tamura, Wojciech Matusik, and Paul Debevec, “Post-Production Facial Performance Relighting using Reflectance Transfer”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH 2007)*, Volume 26, Issue 3, Article 52, August 2007.
- (J33) Muath Sabha, Pieter Peers, and Philip Dutré, “Texture Synthesis using Exact Neighborhood Matching”, *Computer Graphics Forum*, Volume 26, Issue 2, pages 131–142, June 2007.

- (J34) Pieter Peers, Karl vom Berge, Wojciech Matusik, Ravi Ramamoorthi, Jason Lawrence, Szymon Rusinkiewicz, and Philip Dutré, “A Compact Factored Representation of Heterogeneous Subsurface Scattering”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH 2006)*, Volume 25, Issue 3, pages 746–753, July 2006.
- (J35) Vincent Masselus, Pieter Peers, Philip Dutré, and Yves D. Willems, “Relighting with 4D Incident Light Fields”, *ACM Transactions on Graphics (TOG) (Proceedings of ACM SIGGRAPH 2003)*, Volume 22, Issue 3, pages 613–620, July 2003.

• **Internationally Refereed Conference Publications**

- (C1) Sam Sartor, and Pieter Peers, “MatFusion: a Generative Diffusion Model for SVBRDF Capture”, *ACM SIGGRAPH Asia 2023 Conference Proceedings*, December 2023.
- (C2) James Bieron, Xin Tong, and Pieter Peers, “Single Image Neural Material Relighting”, *ACM SIGGRAPH 2023 Conference Proceedings*, August 2023.
- (C3) Chong Zeng, Guojun Chen, Yue Dong, Pieter Peers, Hongzhu Wu, and Xin Tong, “Relighting Neural Radiance Fields with Shadow and Highlight Hints”, *ACM SIGGRAPH 2023 Conference Proceedings*, August 2023.
- (C4) Haiwei Zhang, Jiqing Zhang, Bo Dong, Pieter Peers, Wenwei Wu, Xiaopeng Wei, Felix Heide, and Xin Yang, “In the Blink of an Eye: Event-Based Emotion Recognition”, *ACM SIGGRAPH 2023 Conference Proceedings*, August 2023.
- (C5) Ghada Bakbouk, and Pieter Peers, “Mean Value Caching for Walk on Spheres”, *Eurographics Symposium on Rendering*, June 2023.
- (C6) Yu Qiao, Bo Dong, Ao Jin, Yu Fu, Seung-Hwan Beak, Felix Heide, Pieter Peers, Xiaopeng Wei, and Xin Yang, “Multi-view Spectral Polarization Propagation for Video Glass Segmentation”, *IEEE/CVF International Conference on Computer Vision (ICCV)*, October 2023.
- (C7) Zhaoxuan Zhang, Bo Dong, Tong Li, Felix Heide, Pieter Peers, Baocai Yin, and Xin Yang, “Single Depth-image 3D Reflection Symmetry and Shape Prediction”, *IEEE/CVF International Conference on Computer Vision (ICCV)*, October 2023.
- (C8) Ekin Ozturk, Rob Akers, Abhijeet Ghosh, Stanislas Pamela, Pieter Peers, and The MAST Team, “Neural Plasma Reconstruction from Diagnostic Imaging”, *EPS Conference on Plasma Physics*, June 2022.
- (C9) Haiyang Mei, Bo Dong, Wen Dong, Jiayi Yang, Seung-Hwan Beak, Felix Heide, Pieter Peers, Xiaopeng Wei, and Xin Yang, “Glass Segmentation using Intensity and Spectral Polarization Cues”, *IEEE International Conference on Computer Vision and Pattern Recognition*, June 2022.
- (C10) Rui Yu, Yue Dong, Pieter Peers, and Xin Tong, “Learning Texture Generators for 3D Shape Collections from Internet Photo Sets”, *32nd British Machine Vision Conference*, November 2021.
- (C11) Feng Xie, James Bieron, Pieter Peers, and Pat Hanrahan, “Experimental Analysis of Multiple Scattering BRDF Models”, *Siggraph Asia Technical Communications*, December 2021.
- (C12) Haiyang Mei, Bo Dong, Wen Dong, Pieter Peers, Xin Yang, Qiang Zhang, and Xiaopeng Wei, “Depth-Aware Mirror Segmentation”, *IEEE Conference on Vision and Pattern Recognition (CVPR)*, 2021.
- (C13) James C. Bieron, and Pieter Peers, “An Adaptive Metric for BRDF Appearance Matching”, *Eurographics Workshop on Material Appearance Modeling (MAM)*, 2020.
- (C14) Victoria L. Cooper, James C. Bieron, and Pieter Peers, “Estimating Homogeneous Data-Driven BRDF Parameters from a Reflectance Map under Known Natural Lighting”, *Eurographics Workshop on Material Appearance Modeling (MAM)*, 2019.
- (C15) Xiao Li, Yue Dong, Pieter Peers, and Xin Tong, “Synthesizing 3D Shapes from Silhouette Image Collections using Multi-projection Generative Adversarial Networks”, *IEEE Conference on Vision and Pattern Recognition (CVPR)*, 2019.

- (C16) Han Li, and *Pieter Peers*, “CRF-net: Single Image Radiometric Calibration using CNNs”, *Proceedings of the 14th European Conference on Visual Media Production (CVMP2017)*, Article No. 5, December 2017.
- (C17) Bo Dong, Kathleen D. Moore, Weiyi Zhang, and *Pieter Peers*, “Scattering Parameters and Surface Normals from Homogeneous Translucent Materials using Photometric Stereo”, *IEEE Conference on Vision and Pattern Recognition (CVPR)*, pages 2299 - 2306, June 2014.
- (C18) Murat Kurt, Aydin Ozturk, and *Pieter Peers*, “A Compact Tucker-Based Factorization Model for Heterogenous Subsurface Scattering”, *Conference on Theory and Practice of Computer Graphics (TPCG)*, September 2013.
- (C19) Giuseppe Claudio Guarnera, *Pieter Peers*, Paul Debevec, and Abhijeet Ghosh, “Estimating Surface Normals from Spherical Stokes Reflectance Fields”, *European Conference on Computer Vision (ECCV) – Workshop on Color & Photometry*, pages 340–349, October 2012.
- (C20) Cyrus A. Wilson, Oleg Alexander, Borom Tunwattanapong, *Pieter Peers*, Abhijeet Ghosh, Jay Busch, Arno Hartholt, and Paul Debevec, “Facial Cartography: Interactive High-Resolution Scan Correspondence”, *ACM/Eurographics Symposium on Computer Animation (SCA) 2011*, pages 205–214, August 2011.
- (C21) Bruce Lamond, *Pieter Peers*, Abhijeet Ghosh, Paul Debevec, “Image-based Separation of Diffuse and Specular Reflections using Environmental Structured Illumination”, *IEEE Computational Photography 2009*, April 2009.
- (C22) Wan-Chun Ma, Tim Hawkins, *Pieter Peers*, Charles-Felix Chabert, Malte Weiss, and Paul Debevec, “Rapid Acquisition of Specular and Diffuse Normal Maps from Polarized Spherical Gradient Illumination”, *Rendering Techniques 2007 (Eurographics Symposium on Rendering 2007)*, pages 183–194, June 2007.
- (C23) Thomas Koninckx, *Pieter Peers*, Philip Dutré, and Luc Van Gool, “Scene-adapted Structured Light”, *IEEE International Conference on Computer Vision and Pattern Recognition (CVPR 2005)*, pages 611–618, June 20-25, 2005.
- (C24) *Pieter Peers*, and Philip Dutré, “Inferring Reflectance Functions from Wavelet Noise”, *Rendering Techniques 2005 (Eurographics Symposium on Rendering 2005)*, pages 173–182, June 2005.
- (C25) Vincent Masselus, *Pieter Peers*, Philip Dutré, and Yves D. Willems, “Smooth Reconstruction and Compact Representation of Reflectance Functions for Image-based Relighting”, *Rendering Techniques 2004 (Eurographics Symposium on Rendering 2004)*, pages 287–298, June 2004.
- (C26) *Pieter Peers*, and Philip Dutré, “Wavelet Environment Matting”, *Rendering Techniques 2003 (Eurographics Symposium on Rendering 2003)*, pages 157–166, June 2003.
- **Miscellaneous**
- (M1) Randy Shoemaker, Sam Sartor, and *Pieter Peers*, “Intrinsic Mesh Simplification”, *CoRR, abs/2307.07115*, July 2023.
- (M2) Lee Margetts, Rob Akers, Abhijeet Ghosh, Vignesh Gopakumar, Patrik Hadorn, Mathias Hummel, Peter Messmer, Muhammad Omer, Ekin Ozturk, Stanislas Pamela, *Pieter Peers*, Benedict D Rogers, Mark, Rothwell, WI Sellers, and Oliver Woolland, “Towards Real-time Fusion Reactor Design using the Omniverse”, *Nvidia GPU Technology Conference*, March 2022.
- (M3) Lee Margetts, Rob Akers, Abhijeet Ghosh, Vignesh Gopakumar, Patrik Hadorn, Mathias Hummel, Peter Messmer, Muhammad Omer, Ekin Ozturk, Stanislas Pamela, *Pieter Peers*, Benedict D Rogers, Mark, Rothwell, WI Sellers, and Oliver Woolland, “Development of Fusion Reactor Digital Twins In the Metaverse”, *IET Nuclear Engineering for Safety, Control and Security*, March 2022.
- (M4) Victoria L. Cooper, James C. Bieron, and *Pieter Peers*, “Estimating Homogeneous Data-Driven BRDF Parameters from a Reflectance Map under Known Natural Lighting”, *CoRR, abs/1906.04777*, 2019.
- (M5) Jérémy Riviere, *Pieter Peers*, and Abhijeet Ghosh, “Mobile Surface Reflectometry”, *ACM SIGGRAPH 2014*, Poster Presentation, August 2014.
- (M6) Yufeng Zhu, *Pieter Peers*, Paul Debevec, and Abhijeet Ghosh, “Estimating Diffusion Parameters from Polarized Spherical Gradient Illumination”, *ACM SIGGRAPH 2012*, Technical Talk, August 2012.

- (M7) Giuseppe Claudio Guarnera, *Pieter Peers*, Paul Debevec, and Abhijeet Ghosh, “Estimating Surface Normals from Spherical Stokes Reflectance Fields”, *ACM SIGGRAPH 2012*, Technical Talk, August 2012.
- (M8) Cyrus A. Wilson, Oleg Alexander, Borom Tunwattanapong, *Pieter Peers*, Abhijeet Ghosh, Jay Busch, Arno Hartholt, and Paul Debevec, “Facial Cartography: Interactive High-Resolution Scan Correspondence”, *ACM SIGGRAPH 2011*, Technical Talk, August 2011.
- (M9) Kaori Kikuchi, Bruce Lamond, Abhijeet Ghosh, *Pieter Peers*, and Paul Debevec, “Free-form Polarized Spherical Illumination Reflectometry”, *ACM SIGGRAPH Asia 2010*, Technical Sketch, December 2010.
- (M10) Cyrus A. Wilson, Abhijeet Ghosh, *Pieter Peers*, Jen-Yuan Chiang, Jay Busch, and Paul Debevec, “2D and 3D Facial Correspondences via Photometric Alignment”, *ACM SIGGRAPH 2009*, Technical Talk, August 2009.
- (M11) Abhijeet Ghosh, Tongbo Chen, *Pieter Peers*, Cyrus A. Wilson, and Paul Debevec, “Estimating Specular Roughness from Polarized Second Order Spherical Gradient Illumination”, *ACM SIGGRAPH 2009*, Technical Talk, August 2009.
- (M12) Wan-Chun Ma, Tim Hawkins, *Pieter Peers*, Charles-Felix Chabert, Malte Weiss, and Paul Debevec, “A High-Resolution Face-Scanning System Using Polarized Gradient Illumination”, *ACM SIGGRAPH 2007*, Technical Sketch, August 2007.
- (M13) Charles-Félix Chabert, Wan-Chun Ma, Tim Hawkins, *Pieter Peers*, and Paul Debevec, “Fast Rendering of Realistic Faces With Wavelength-Dependent Normal Maps”, *ACM SIGGRAPH 2007*, Poster Presentation, August 2007.
- (M14) Bruce Lamond, *Pieter Peers*, and Paul Debevec, “Fast Image-based Separation of Diffuse and Specular Reflections”, *ACM SIGGRAPH 2007*, Technical Sketch, August 2007.
- (M15) Philip Dutré, and *Pieter Peers*, “Wavelet Environment Matting”, *Hierarchical Methods in Computer Graphics*, Dagstuhl Seminar 03271, June 29–July 4, 2003.
- (M16) *Pieter Peers*, and Philip Dutré, “Accurate Image Based Re-lighting through optimization”, *13th Eurographics Workshop on Rendering*, Poster Presentation, June 2002.
- (M17) *Pieter Peers*, and Philip Dutré, “Accurate Image Based Re-lighting through optimization”, *ACM SIGGRAPH 2002*, Technical Sketch, July 2002.

- **Technical Reports**

- (T1) Hideshi Yamada, *Pieter Peers*, Paul Debevec, “Compact Representation of Reflectance Fields using Clustered Sparse Residual Factorization”, *ICT Technical Report*, ICT-TR-02-2009, June 17, 2009, ICT/USC, 11 pages.
- (T2) *Pieter Peers*, Dhruv K. Mahajan, Bruce Lamond, Abhijeet Ghosh, Wojciech Matusik, Ravi Ramamoorthi, Paul Debevec, “Compressive Light Transport Sensing”, *ICT Technical Report*, ICT-TR-05.2008, May 30, 2008, ICT/USC, 17 pages.
- (T3) Bruce Lamond, *Pieter Peers*, Paul Debevec, “Fast Image-based Separation of Diffuse and Specular Reflections”, *ICT Technical Report*, ICT-TR-02.2007, May 21, 2007, ICT/USC, 7 pages.
- (T4) *Pieter Peers*, Tim Hawkins, Paul Debevec, “A Reflective Light Stage”, *ICT Technical Report*, ICT-TR-04.2006, December 23, 2006, ICT/USC, 18 pages.
- (T5) *Pieter Peers* and Philip Dutré, “Update Rules for a Weighted Non-negative FH\*G Factorization”, *Technical Report CW440*, Department of Computer Science, K.U.Leuven, April 2006, 7 pages.
- (T6) *Pieter Peers*, Vincent Masselus and Philip Dutré, “Free-form Acquisition of Shape and Appearance”, *Technical Report CW403*, Department of Computer Science, K.U.Leuven, February 2005, 18 pages.
- (T7) *Pieter Peers* and Philip Dutré, “Accurate Image Based Re-lighting through optimization”, *Technical Report CW336*, Department of Computer Science, K.U. Leuven, April 2002, 17 pages.

## Patents

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- (P1) #8,300,234, “Estimating spectral distribution of reflections from object surface based on low frequency illumination”, Oct. 30, 2012
- (P2) #8,988,599, “Illumination Sphere with Intelligent LED Lighting Units in Scalable Daisy Chain with Interchangeable Filters”, Mar. 31, 2015

## Teaching Experience

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- **(W&M) CSCI 427/527 - Fundamentals of Computer Graphics** Spr. 11-16, 18-22, 24  
A new course and syllabus.
- **(W&M) CSCI 437 - Introduction to Game Design and Game Development** Fall 14-15, 17-19, Spring 21-22, 24  
A new course and syllabus.
- **(W&M) CSCI 780 - Computer Graphics vs. Computer Vision** Spr. 20  
A new course and syllabus.
- **(W&M) CSCI 780 - Advanced Computer Graphics** Fall 11, 13, 15  
A new course and syllabus.
- **(W&M) CSCI 790 - Large Scale Scene Matching** Fall 14  
Reading class.
- **(W&M) CSCI 141 - Introduction to Computer Science** Fall 13  
Replaced instructor (Debbie Noonan) for 5 lectures.
- **(W&M) CSCI 690 - Neural Reflectance Models** Spr. 24  
Reading class.
- **(W&M) CSCI 790 - Advanced Global Illumination** Fall 13  
Reading class.
- **(W&M) CSCI 790 - Signal Processing for Rendering** Fall 12  
Reading class.
- **(W&M) CSCI 790 - Computer Vision** Spr. 12  
Reading class.
- **(W&M) CSCI 780 - Topics in Computer Graphics** Fall 10, 12  
A new course and syllabus.
- **(W&M) CSCI 790 - Polygon Mesh Processing** Spr. 11  
Reading class.
- **(USC) CS 599 - Advanced Computer Graphics: Photographic Image Synthesis** Spr. 09-10  
(together with Prof. Paul Debevec, and Dr. Abhijeet Ghosh).  
A new course and syllabus, highly rated by students.
- **(KUL) Practical Sessions Computer Graphics** 2000-06  
Designing and grading practical tests (approx. 60 students per year).
- **(KUL) Advanced Programming Structures** November 2005  
Replaced Prof. Dr. ir. Yves D. Willems for a single lecture.

- **(KUL) Advanced Programming Structures** 2003-2005
  - Teaching of advanced programming techniques (practical sessions), such as backtracking. (approx. 45 students per year).
- **(KUL) Computer Graphics** October 2004
  - Replaced Prof. Dr. ir. Philip Dutré for a single lecture.
- **(KUL) Methodology of Computer Science** 2001-2004
  - Teaching of practical sessions on an introduction to JAVA.
  - Included the design and grading of practical tests (2 classes of 25 students per year).
- **(KUL) Structure and Organization of Computer Systems** 2000-2001
  - Teaching of practical sessions on an introduction to assembler languages. (3 classes of 25 students).

## Honors, Prizes and Awards

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- W&M Alumni Fellowship Award 2016
- Plumeri Award for Faculty Excellence 2017
- Class of 2020 Influencer Recognition 2021

## Professional Activities

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- **Technical Program Chair**
  - Eurographic Symposium On Rendering (EGSR) 2014 (co-chair with Wojciech Jarosz).
- **Program Committees**
  - ACM Siggraph, 2020.
  - ACM Siggraph Asia 2013-2015, 2019.
  - ACM Siggraph Asia, Poster & Briefs, 2016
  - CGI 2011, 2015-2016.
  - ProCams 2011-2012.
  - Computational Cameras and Displays (CCD) 2013
  - VMV 2007 - 2009.
  - Eurographics (EG) 2009 - 2010, 2015, 2024.
  - Eurographics Symposium on Rendering (EGSR) 2009-2011, 2013, 2017-2020, 2022-2023.
  - Asian Conference on Computer Vision (ACCV) 2010, 2012, 2014, 2016, 2018.
  - Pacific Graphics 2013-2016.
  - SIBGRAPHI 2014-2018.
- **Reviewing**
  - *Conference Reviewing*
    - \* ACM Siggraph 2004 - 2024.
    - \* ACM Siggraph Asia 2008 - 2023.
    - \* Eurographics Symposium on Rendering (EGSR) 2003 - 2013, 2015-2023.
    - \* Eurographics (EG) 2007 - 2024.
    - \* Vision, Modeling and Visualization (VMV) 2007 - 2009.
    - \* ProCams - 2011-2012.
    - \* Pacific Graphics (PG) 2006, 2013-2018.
    - \* Graphics Interface (GI) 2008.



- \* IEEE International Conference on Computational Photography (ICCP) 2009.
- \* IEEE International Conference on Computer Vision and Pattern Recognition (CVPR) 2023-2024.
- \* European Conference on Computer Vision (ECCV) 2024.
- \* Asian Conference on Computer Vision (ACCV) 2009-2012, 2014, 2016, 2018.
- *Journal Reviewing*
  - \* ACM Transactions on Graphics (TOG).
  - \* Computer Graphics Forum (CGF).
  - \* IEEE Transactions on Visualization and Computer Graphics (TVCG).
  - \* IEEE Transactions on Pattern Recognition and Machine Intelligence (PAMI)
  - \* Pattern Recognition.
  - \* Image and Vision Computing (IVC).
  - \* Computer and Graphics (CAG).
  - \* 3D Imaging, Processing and Modeling (SI:3D)

## Professional Services

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- |   |  |
|---|--|
| • Awards & Prizes, Chair (CSCI-W&M)   | Fall 23 - Spr. 24                      |
| • Faculty Hiring Committee (CSCI-W&M)                                       | Fall 23 - Spr. 24                      |
| • Undergraduate Research Committee (W&M)                                    | Fall 21 - Spr. 24                      |
| • Graduate Curriculum Committee, Chair (CSCI-W&M)                           | Fall 17 - Spr. 22<br>Fall 23 - Spr. 24 |
| • Freshmen Advising (W&M)   | Fall 2013- Spr. 24                     |
| • Zable Graduate Fellowship Committee (W&M)                                 | Fall 23- Spr. 24                       |
| • Personnel Committee (CSCI-W&M)  | Spring 18 - Spr. 24                    |
| • Committee on Nominations & Elections, Chair (W&M)                         | Fall 22 - Spr. 23                      |
| • Graduate Director (CSCI-W&M)  | Fall 18 - Spr. 22                      |
| • Committee on Nominations & Elections (W&M)                                | Fall 20 - Spr. 22                      |
| • Committee on Graduate Studies and Research (W&M)                          | Fall 18 - Spr. 22                      |
| • Graduate Admission Committee, Chair (CSCI-W&M)                            | Fall 18 - Spr. 22                      |
| • System Committee (CSCI-W&M)   | Fall 2017 - Spring 19, 21-22           |
| • Recruiting Outreach Committee, Chair (CSCI-W&M)                           | Fall 18 - Spr. 21                      |
| • Admission Policy Advisory Committee (W&M)                                 | Fall 17 - Spr. 21                      |
| • System Committee, Chair (CSCI-W&M)  | Fall 19 - Spr. 21                      |
| • Consensual Amorous Relations (CAR) Working Group (COGS-W&M)               | Fall 19 - Spr. 20                      |
| • Pre-doc Working Group (A&S-W&M)   | Fall 19 - Spr. 20                      |
| • Faculty Assembly (W&M)  | Fall 18 - Spr. 19                      |
| • Graduate Admission Committee (CSCI-W&M)                                   | Fall 10 - Spr. 13<br>Fall 17 - Spr. 18 |
| • Committee for Natural and Comp. Sciences Undergrad. Mentoring Award (W&M) | Spr. 12-18                             |
| • Committee for Natural and Comp. Sciences Thesis/Dissertation Awards (W&M) | Spr. 12-16                             |
| • Colloquium Committee (CSCI-W&M)   | Fall 10 - Spr. 16                      |
| • Graduate Curriculum Committee (CSCI-W&M)                                  | Fall 10 - Spr. 16                      |
| • Faculty Recruiting (CSCI-W&M)   | Fall 2013 - Spring 2016                |

- Graduate Research Symposium – Session Chair (W&M) Fall 15
- Park Graduate Award Selection Committee (CSCI-W&M) Fall 13-15
- International Orientation Session - Speaker Accademic Culture (W&M) Summer 13
- Committee for Thomas Jefferson Prize in Natural Philosophy (W&M) Fall 13