

MURAT KURT

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PROFESSIONAL EXPERIENCE

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|-----------------------|---|
| AUG. 2022 - PRESENT | Associate Professor.
International Computer Institute, Ege University, İZMİR, TURKEY. |
| JAN. 2020 - AUG. 2022 | Assistant Professor.
International Computer Institute, Ege University, İZMİR, TURKEY. |
| NOV. 2005 - JAN. 2020 | Research Assistant.
International Computer Institute, Ege University, İZMİR, TURKEY. |

EDUCATION

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| SEPT. 2007 - FEB. 2014 | International Computer Institute, Ege University, İZMİR, TURKEY.
Ph.D. in Computer Science.
Thesis: "An Efficient Model for Subsurface Scattering in Translucent Materials".
Advisor: Prof. Dr. Aydın ÖZTÜRK.
GPA: 91.14/100. |
| SEPT. 2003 - AUG. 2007 | International Computer Institute, Ege University, İZMİR, TURKEY.
M.Sc. in Computer Science.
Thesis: "A New Illumination Model in Computer Graphics".
Advisor: Prof. Dr. Aydın ÖZTÜRK.
GPA: 88.25/100. |
| SEPT. 1998 - JUNE 2002 | Department of Civil Engineering, Dokuz Eylül University, İZMİR, TURKEY.
B.Sc. in Civil Engineering.
Thesis: "Self Compact Concrete and Experimental Studies on Self Compact Concrete".
Advisor: Prof. Dr. Bülent BARADAN.
GPA: 84.00/100 (3.40/4.00). |

RESEARCH INTERESTS

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|-----------------------|---|
| Computer Graphics: | Appearance Capture, Appearance Modeling, Realistic and Physically-Based Rendering, Global Illumination Algorithms, Participating Media, Subsurface Scattering, Monte Carlo Methods and Efficient Sampling, Real-Time and GPU-Based Rendering. |
| Computer Vision: | Image Processing, Licence Plate Recognition, Pattern Recognition, Object Detection and Image Classification. |
| Scientific Computing: | Factorization Techniques, Optimization, Compression Methods, Interpolation Techniques, Probability and Statistics, Linear and Non-Linear Fitting Techniques, Genetic Algorithms, Artificial Intelligence, Machine Learning and Deep Learning. |

GRANTS AND AWARDS

2022	Ege University Certificate of Appreciation.
2020	Ege University Certificate of Appreciation.
2009 - 2019	Figure 5 in “Linear approximation of Bidirectional Reflectance Distribution Functions” was selected for the front cover of Computers & Graphics.
2019	Ege University Certificate of Appreciation.
2017	Computers & Graphics Certificate of Outstanding Contribution in Reviewing.
2016	Inclusion in the 12 th Edition of Who’s Who in Science and Engineering.
2015	Computers & Graphics Valuable Reviewer Award 2013-2014.
2015	Ege University Science and Technology Center (EBİLTEM) Project Submission Award.
2014	Inclusion in the 32 nd Edition of Who’s Who in the World.
2012 - 2014	Microsoft Hardware and Software Gifts.
2013	Inclusion in the 31 st Edition of Who’s Who in the World.
2012	Inclusion in the 30 th Edition of Who’s Who in the World.
2012	Ege University Science and Technology Center (EBİLTEM) Publication Award.
2008 - 2011	The Scientific and Technological Research Council of Turkey (TÜBİTAK) Turkish Academic Network and Information Center (ULAKBİM) International Scientific Publication Encouragement Award.
2010	The Best Paper Award was given to “Adaptive Sampling for Environment Mapping” in the 26 th Spring Conference on Computer Graphics (SCCG '10).
2007 - 2012	The Scientific and Technological Research Council of Turkey (TÜBİTAK) Ph.D. Scholarship (program no: 2211).
2002	Ranked 2 nd in Graduation from Department of Civil Engineering, Dokuz Eylül University, İZMİR, TURKEY.
2000 - 2002	Honor Student at B.Sc. Program, Dokuz Eylül University, İZMİR, TURKEY.

CURRENT PROJECTS

MARCH 2021 - MAY 2022	TÜBİTAK Project, Ege University, İZMİR, TURKEY. Project Name: “Development of An Analysis System that Can Run Modular Applications on Cloud-Managed Secure Edge Devices”. Principal Investigator: Turan Can Artunç. Position: Project Advisor.
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Project No - Project Budget: 3210349 - 94.000 \$.
Funded By: 1501-Industry R&D Projects Support Programme,
TÜBİTAK, TURKEY.
Description: Designing and implementing a deep learning
based monitoring system using mainly C++, Python, and NVIDIA
Jetson devices.

COMPLETED PROJECTS

- APR. 2020 - APR. 2022 TÜBİTAK Project, Ege University, İZMİR, TURKEY.
Project Name: "A Genetic Algorithm for Measured Subsurface
Scattering Representation".
Position: Principal Investigator.
Project No - Project Budget: 119E092 - 62.500 \$.
Funded By: 1001-Scientific and Technological Research Projects
Support Programme, TÜBİTAK, TURKEY.
Description: Modeled subsurface scattering in translucent
materials and rendered a subsurface scattering model using
mainly C++, MATLAB, and MITSUBA.
- OCT. 2015 - OCT. 2018 Scientific Research Project, Ege University, İZMİR, TURKEY.
Project Name: "A Data-Driven BSDF Representation".
Position: Principal Investigator.
Project No - Project Budget: 2015/BİL/043 - 5.000 \$.
Funded By: Scientific Research Projects Directorate, Ege Uni-
versity, TURKEY.
Description: Interpolated and modeled sparsely measured BSDF
data in translucent materials and rendered a data-driven BSDF
representation using mainly C++, MATLAB, and RADIANCE.
- JUN. 2015 - OCT. 2017 Scientific Research Project, Ege University, İZMİR, TURKEY.
Project Name: "Augmented Reality Based Educational Game De-
sign with Virtual Reality Glasses".
Position: Principal Investigator.
Project No - Project Budget: 2015/UBE/001 - 12.500 \$.
Funded By: Scientific Research Projects Directorate, Ege Uni-
versity, TURKEY.
Description: Designed and implemented an augmented reality
application using mainly UNITY game engine.
- SEP. 2015 - SEP. 2017 TÜBİTAK Project, Ege University, İZMİR, TURKEY.
Project Name: "A Data-Driven BSDF Representation".
Position: Principal Investigator.
Project No - Project Budget: 115E203 - 32.500 \$.
Funded By: 3001-Start R&D Projects Support Programme,
TÜBİTAK, TURKEY.
Description: Interpolated and modeled sparsely measured BSDF
data in translucent materials and rendered a data-driven BSDF
representation using mainly C++, MATLAB, and RADIANCE.
- MAY 2012 - MAY 2014 TÜBİTAK Project, Ege University, İZMİR, TURKEY.
Project Name: "An Efficient Model for Subsurface Scattering in
Translucent Materials".
Principal Investigator: Prof. Dr. Aydın ÖZTÜRK.
Position: Researcher and Software Developer.

- Project No - Project Budget: 11E208 - 89.000 \$.
 Funded By: 1001-Scientific and Technological Research Projects Support Programme, TÜBİTAK, TURKEY.
 Description: Modeled subsurface scattering in translucent materials and rendered a subsurface scattering model using mainly C++, MATLAB, and MITSUBA.
- JULY 2011 - JUNE 2013 Scientific Research Project, Ege University, İZMİR, TURKEY.
 Project Name: "Using of Android-Based Systems on Augmented Reality and Education".
 Principal Investigator: Asst. Prof. Dr. Cengiz GÜNGÖR.
 Position: Researcher and Software Developer.
 Project No - Project Budget: 2011/UBE/002 - 14.500 \$.
 Funded By: Scientific Research Projects Directorate, Ege University, TURKEY.
 Description: Designed and implemented an augmented reality application using mainly UNITY game engine.
- OCT. 2010 - OCT. 2012 Scientific Research Project, Ege University, İZMİR, TURKEY.
 Project Name: "Color Reduction of Bidirectional Reflectance Distribution Function (BRDF) Data with Neural Networks".
 Principal Investigator: Assoc. Prof. Dr. Muhammed CİNSDİKİCİ.
 Position: Researcher and Software Developer.
 Project No - Project Budget: 2010/UBE/002 - 7.500 \$.
 Funded By: Scientific Research Projects Directorate, Ege University, TURKEY.
 Description: Modeled measured BRDF data and rendered a data-driven BRDF model using mainly C++, MATLAB and PBRT.
- JUNE 2009 - JUNE 2012 Scientific Research Project, Ege University, İZMİR, TURKEY.
 Project Name: "A Human Face Model Extraction Using New Technologies and Capturing of Body Motion which Belongs to the Model".
 Principal Investigator: Asst. Prof. Dr. Cengiz GÜNGÖR.
 Position: Researcher and Software Developer.
 Project No - Project Budget: 2009/UBE/001 - 4.000 \$.
 Funded By: Scientific Research Projects Directorate, Ege University, TURKEY.
 Description: Investigated algorithms which are targeted on extracting characteristic facial features, building face model from pictures, accurate representation of face model, and motion detection.
- FEB. 2010 - FEB. 2012 KOSGEB Project, Ege University, İZMİR, TURKEY.
 Project Name: "Three-Dimensional Dies Design Program Development".
 Principal Investigator: Mustafa BİNTAŞ.
 Project Advisor: Prof. Dr. Aydın ÖZTÜRK and Asst. Prof. Dr. Cengiz GÜNGÖR.
 Position: Volunteer Researcher and Software Developer.
 Project No - Project Budget: 2010/03 - 370.000 \$.
 Funded By: Technology R&D Support Programme, KOSGEB, TURKEY.
 Description: Designed and implemented a CAD solution using mainly C++ and QT.

- MARCH 2010 - AUG. 2011 TÜBİTAK Project, Ege University, İZMİR, TURKEY.
 Project Name: "Process Innovation at Dies Design and Three-Dimensional Design Program Development".
 Principal Investigator: Mustafa BİNTAŞ.
 Project Advisor: Prof. Dr. Aydın ÖZTÜRK and Asst. Prof. Dr. Cengiz GÜNGÖR.
 Position: Volunteer Researcher and Software Developer.
 Project No - Project Budget: 7090852 - 260.000 \$.
 Funded By: 1507-KOBİ R&D Start Support Programme, TÜBİTAK, TURKEY.
 Description: Designed and implemented a CAD solution using mainly C++ and QT.
- SEP. 2007 - SEP. 2009 Scientific Research Project, Ege University, İZMİR, TURKEY.
 Project Name: "A License Plate Recognition (LPR) System for Ege University Campus Car Entrance Control".
 Principal Investigator: Assoc. Prof. Dr. Muhammed CİNSDİKİCİ.
 Position: Researcher and Software Developer.
 Project No - Project Budget: 2007/UBE/002 - 7.000 \$.
 Funded By: Scientific Research Projects Directorate, Ege University, TURKEY.
 Description: Designed and implemented a GUI solution using mainly C# and MATLAB.
- SEP. 2007 - SEP. 2008 Scientific Research Project, Ege University, İZMİR, TURKEY.
 Project Name: "Medical Image Registration for Radiological Images of the Same Patient Taken at Different Points in Time and Determination of the Abnormal Progress and Measurement of Areas of These Regions".
 Principal Investigator: Asst. Prof. Dr. Cengiz GÜNGÖR.
 Position: Researcher and Software Developer.
 Project No - Project Budget: 2007/UBE/003 - 7.000 \$.
 Funded By: Scientific Research Projects Directorate, Ege University, TURKEY.
 Description: Designed and implemented a GUI solution using mainly C++ and MATLAB.
- SEP. 2005 - DEC. 2006 Co-operative Research Project (CRAFT), Ege University, İZMİR, TURKEY.
 Project Name: "CAD Production Pipeline (CADPIPE)".
 Project Coordinator: Hannu KUUKKANEN.
 Co-Principal Investigator: Prof. Dr. Aydın ÖZTÜRK.
 Position: Researcher and Software Developer.
 Project No - Project Budget: 512897 - 1.200.000 €.
 Funded By: The Sixth Framework Programme (FP6), The European Union (EU).
 Description: Designed and implemented a CAD solution using mainly C++ and MFC.

SUPERVISION

SUPERVISED M.SC. STUDENTS

Spring 2020 - Fall 2022 Barış Yıldırım.

Thesis Title: "A Genetic Algorithm Based Plugin for Measured Subsurface Scattering Representation".
Position After Graduation: Software Engineer at İzmir Innovation and Technology Inc., Turkey.

SUPERVISED NON-THESIS M.SC. STUDENTS

- Fall 2020 - Fall 2022 Halil Arslan.
Project Title: "House Price Prediction with Machine Learning Algorithms".
Position After Graduation: Project and Investment Manager at Kutlusan Cage Inc., Turkey.
- Fall 2020 - Spring 2022 Mehmet Emin Öğünür.
Project Title: "Robot Arm Design on Unity Platform and Testing Pick&Place Functions in Industrial Environment".
Position After Graduation: R&D Manager at Zorel&Poulmech Cage Co., Turkey.
- Fall 2020 - Spring 2021 Aykut Bozalan.
Project Title: "Developing Car Racing Game on Unity Platform".
Position After Graduation: Information Technology Teacher at Menemen Public Education Center, Turkey.

TEACHING EXPERIENCE

INSTRUCTOR, INTERNATIONAL COMPUTER INSTITUTE, EGE UNIVERSITY, İZMİR, TURKEY.

- FALL 2022 UBI 505 - Computer Organization.
UBI 621 - Computer Vision and Deep Learning.
UTİ 505 - Computer Architecture.
- SPRING 2022 UBI 506 - Operating Systems.
UBI 516 - Advanced Computer Graphics.
UTİ 518 - Computer Graphics and Game Programming.
- FALL 2021 UBI 505 - Computer Organization.
UBI 621 - Computer Vision.
UTİ 505 - Computer Architecture.
- SPRING 2021 UBI 506 - Operating Systems.
UBI 516 - Advanced Computer Graphics.
UTİ 518 - Computer Graphics and Game Programming.
- FALL 2020 UBI 505 - Computer Organization.
UBI 621 - Computer Vision.
UTİ 505 - Computer Architecture.
- SPRING 2020 UBI 506 - Operating Systems.
UBI 516 - Advanced Computer Graphics.
UTİ 518 - Computer Graphics and Game Programming.
- SPRING 2018 UBI 516 - Advanced Computer Graphics.
FALL 2017 UBI 505 - Computer Organization.
UBI 625 - Advanced Rendering Techniques.

SPRING 2016 UBI 516 - Advanced Computer Graphics.

TEACHING ASSISTANT, INTERNATIONAL COMPUTER INSTITUTE, EGE UNIVERSITY, İZMİR, TURKEY.

FALL 2019 UBI 601 - Advanced Computer Architecture.
UBI 619 - Natural Language Processing.

SPRING 2019 UBI 508 - Information Systems.
UBI 618 - Information Retrieval Systems.
UTİ 520 - Information Retrieval and Search Engines.
UTİ 526 - Object Oriented Programming.

FALL 2018 UBI 503 - Data Structures and Algorithms (with C).
UBI 505 - Computer Organization.
UBI 525 - Object Oriented Programming.
UTİ 503 - Data Structures and Algorithms (with C).

SPRING 2018 UBI 508 - Information Systems.
UTİ 520 - Information Retrieval and Search Engines.

SPRING 2017 UBI 532 - Mobile Ad Hoc Networks and Wireless Sensor Networks.
UTİ 526 - Object Oriented Programming.

FALL 2016 UBI 503 - Data Structures and Algorithms (with C).
UBI 505 - Computer Organization.
UTİ 503 - Data Structures and Algorithms (with C).

SPRING 2016 UTİ 518 - Computer Graphics and Game Programming.
FALL 2015 UBI 509 - Network Science.
UBI 545 - Distributed Algorithms.
UTİ 515 - Distributed Algorithms for Computer Networks.

SPRING 2015 UBI 516 - Advanced Computer Graphics.
UTİ 530 - Mobile and Distributed Technologies.

FALL 2014 UBI 545 - Distributed Algorithms.
UBI 551 - Mobile Programming.
UTİ 551 - Mobile Programming.

SPRING 2014 UBI 516 - Advanced Computer Graphics.
UBI 532 - Mobile Ad Hoc Networks and Wireless Sensor Networks.
UTİ 522 - Wireless Sensor Networks.

FALL 2013 OUBE 603 - Algorithm and Complexity.
OUBE 615 - Distributed Algorithms.
UBI 545 - Distributed Algorithms.
UTİ 527 - Design and Analysis of Algorithms.

SPRING 2013 UBI 516 - Advanced Computer Graphics.
UBI 532 - Mobile Ad Hoc Networks and Wireless Sensor Networks.
UTİ 522 - Wireless Sensor Networks.

FALL 2012 OUBE 603 - Algorithm and Complexity.
UBI 545 - Distributed Algorithms.

SPRING 2012 UBI 516 - Advanced Computer Graphics.
FALL 2011 UBI 621 - Image Processing.

SPRING 2011 UBI 516 - Advanced Computer Graphics.
FALL 2010 UBI 621 - Image Processing.

SPRING 2010	UBI 516 - Advanced Computer Graphics. UBI 532 - Wireless Sensor Networks.
FALL 2009	UBI 621 - Digital Image Processing.
SPRING 2009	UBI 516 - Advanced Computer Graphics. UBI 532 - Wireless Sensor Networks.
FALL 2008	UBI 503 - Data Structures and Algorithms (with C). UBI 621 - Digital Image Processing.
SPRING 2008	UBI 504 - Programming Languages. UBI 516 - Advanced Computer Graphics. UBI 612 - Digital Image Processing.
FALL 2007	UBI 503 - Data Structures and Algorithms (with C).
SPRING 2007	UBI 516 - Advanced Computer Graphics.
FALL 2006	UBI 503 - Data Structures and Algorithms (with C++).
SPRING 2006	UBI 516 - Advanced Computer Graphics.

PUBLICATIONS

JOURNAL PAPERS

- [1] Sermet Mir, Barış Yıldırım, and Murat Kurt. An Analysis of Goniochromatic and Sparkle Effects on Multi-Layered Materials. *Journal of Science and Engineering*, 24(72):737–746, September 2022.
- [2] Murat Kurt. GenSSS: a genetic algorithm for measured subsurface scattering representation. *The Visual Computer*, 37(2):307–323, February 2021.
- [3] Tanaboon Tongbuasirilai, Jonas Unger, Joel Kronander, and Murat Kurt. Compact and intuitive data-driven BRDF models. *The Visual Computer*, 36(4):855–872, April 2020.
- [4] Murat Kurt. Real-Time Shading with Phong BRDF Model. *Journal of Science and Engineering*, 21(63):859–867, September 2019.
- [5] Murat Kurt. A Survey of BSDF Measurements and Representations. *Journal of Science and Engineering*, 20(58):87–102, January 2018.
- [6] Ahmet Bilgili, Aydın Öztürk, and Murat Kurt. A General BRDF Representation Based on Tensor Decomposition. *Computer Graphics Forum*, 30(8):2427–2439, December 2011. (Presented at Eurographics 2012).
- [7] László Szécsi, László Szirmay-Kalos, Murat Kurt, and Balázs Csébfalvi. Adaptive Sampling for Global Illumination Rendering. *Computer Graphics and Geometry*, 13(1):14–30, 2011.
- [8] Aydın Öztürk, Murat Kurt, and Ahmet Bilgili. A Copula-Based BRDF Model. *Computer Graphics Forum*, 29(6):1795–1806, September 2010.
- [9] Murat Kurt, László Szirmay-Kalos, and Jaroslav Křivánek. An Anisotropic BRDF Model for Fitting and Monte Carlo Rendering. *SIGGRAPH Computer Graphics*, 44(1):1–15, February 2010.
- [10] Murat Kurt and Dave Edwards. A Survey of BRDF Models for Computer Graphics. *SIGGRAPH Computer Graphics*, 43(2):1–7, May 2009.
- [11] Murat Kurt and Muhammed Gökhan Cinsdikici. Representing BRDFs Using SOMs and MANs. *SIGGRAPH Computer Graphics*, 42(3):1–18, August 2008.

- [12] Aydin Ozturk, Murat Kurt, Ahmet Bilgili, and Cengiz Gungor. Linear approximation of Bidirectional Reflectance Distribution Functions. *Computers & Graphics*, 32(2):149–158, April 2008.

PEER-REVIEWED INTERNATIONAL CONFERENCE PAPERS

- [13] Murat Kurt. A Genetic Algorithm Based Heterogeneous Subsurface Scattering Representation. In Reinhard Klein and Holly Rushmeier, editors, *Proceedings of the 8th Eurographics Workshop on Material Appearance Modeling: Issues and Acquisition*, MAM '20, pages 13–16, London, UK, 2020. The Eurographics Association.
- [14] Ecem İren and Murat Kurt. Experimental Analysis of QEM Based Mesh Simplification Techniques. In *Proceedings of the 4th International Conference on Computer Graphics, Animation and Gaming Technologies*, Eurasia Graphics '17, pages 1–10, İstanbul, Turkey, November 2017. Abakus.
- [15] Tanaboon Tongbuasirilai, Jonas Unger, and Murat Kurt. Efficient BRDF Sampling Using Projected Deviation Vector Parameterization. In *Proceedings of the IEEE International Conference on Computer Vision Workshops*, ICCVW '17, pages 153–158, Venice, Italy, October 2017. IEEE Computer Society.
- [16] Murat Kurt. Experimental Analysis of BSDF Models. In Reinhard Klein and Holly Rushmeier, editors, *Proceedings of the 5th Eurographics Workshop on Material Appearance Modeling: Issues and Acquisition*, MAM '17, pages 35–39, Helsinki, Finland, 2017. The Eurographics Association.
- [17] Sermet Önel, Murat Kurt, and Aydın Öztürk. An Efficient Plugin for Representing Heterogeneous Translucent Materials. In *Proceedings of the 2nd International Conference on Computer Graphics, Animation and Gaming Technologies*, Eurasia Graphics '14, pages 2:1–2:5, Ankara, Turkey, October 2014. Hacettepe University Press.
- [18] Greg Ward, Murat Kurt, and Nicolas Bonneel. Reducing Anisotropic BSDF Measurement to Common Practice. In Reinhard Klein and Holly Rushmeier, editors, *Proceedings of the 2nd Eurographics Workshop on Material Appearance Modeling: Issues and Acquisition*, MAM '14, pages 5–8, Lyon, France, 2014. Eurographics Association.
- [19] Murat Kurt, Aydın Öztürk, and Pieter Peers. A Compact Tucker-Based Factorization Model for Heterogeneous Subsurface Scattering. In Silvester Czanner and Wen Tang, editors, *Proceedings of the 11th Theory and Practice of Computer Graphics*, TPCG '13, pages 85–92, Bath, United Kingdom, 2013. Eurographics Association.
- [20] Serkan Ergun, Murat Kurt, and Aydın Öztürk. Real-time Kd-tree Based Importance Sampling of Environment Maps. In *Proceedings of the 28th Spring Conference on Computer Graphics*, SCCG '12, pages 77–84, New York, NY, USA, 2012. ACM.
- [21] Ahmet Bilgili, Aydın Öztürk, and Murat Kurt. Representing BRDF by Wavelet Transformation of Pair-Copula Constructions. In *Proceedings of the 28th Spring Conference on Computer Graphics*, SCCG '12, pages 63–69, New York, NY, USA, 2012. ACM.
- [22] Mustafa Bintas, Aydin Ozturk, Cengiz Gungor, Aycan Tutay, Ahmet Bilgili, Murat Kurt, Serkan Ergun, Tugce Kayitken, and Ercan Gercek. Development of a Computer Aided Die Design Software and Die Design Process Modeling. In Metin Kök, Erhan Budak, Mehmet Firat, and Bilgin Kaftanoğlu, editors, *Proceedings of the 6th International Conference and Exhibition on Design and Production of Machines and Dies/Molds*, pages 285–290, Ankara, Turkey, 2011. Atılım University Publications.
- [23] Aydın Öztürk, Murat Kurt, and Ahmet Bilgili. Modeling BRDF by a Probability Distribution. In *Proceedings of the 20th International Conference on Computer Graphics and Vision*, pages 57–63, St. Petersburg, Russia, 2010.

- [24] László Szécsi, László Szirmay-Kalos, Murat Kurt, and Balázs Csébfalvi. Adaptive Sampling for Environment Mapping. In *Proceedings of the 26th Spring Conference on Computer Graphics*, SCCG '10, pages 69–76, New York, NY, USA, 2010. ACM.
- [25] László Szécsi, László Szirmay-Kalos, and Murat Kurt. Adaptive Sampling with Error Control. In *Proceedings of the Fifth Hungarian Conference on Computer Graphics and Geometry*, pages 47–54, Budapest, Hungary, 2010.
- [26] Aydin Öztürk, Ahmet Bilgili, and Murat Kurt. Polynomial Approximation of Blinn-Phong Model. In Louise M. Lever and Mary McDerby, editors, *Proceedings of the 4th Theory and Practice of Computer Graphics*, TPCG '06, pages 55–61, Middlesbrough, United Kingdom, 2006. Eurographics Association.

PEER-REVIEWED NATIONAL CONFERENCE PAPERS

- [27] Özkan Anıl Töral, Serkan Ergun, Murat Kurt, and Aydın Öztürk. Mobile GPU-Based Importance Sampling. In *Proceedings of the IEEE 22nd Signal Processing and Communications Applications Conference*, SIU '14, pages 510–513, Trabzon, Turkey, April 2014. IEEE.
- [28] Cengiz Güngör and Murat Kurt. Improving Visual Perception of Augmented Reality on Mobile Devices with 3D Red-Cyan Glasses. In *Proceedings of the IEEE 22nd Signal Processing and Communications Applications Conference*, SIU '14, pages 1706–1709, Trabzon, Turkey, April 2014. IEEE.

BOOK CHAPTERS

- [29] Ecem İren and Murat Kurt. Experimental Analysis of QEM Based Mesh Simplification Techniques. In Veysi İşler, Haşmet Gürçay, Hasan Kemal Süher, and Güven Çatak, editors, *Contemporary Topics in Computer Graphics and Games: Selected Papers from the Eurasia Graphics Conference Series*, chapter 13, pages 233–241. Peter Lang GmbH, Internationaler Verlag der Wissenschaften, December 2019. (Book Chapter).
- [30] Sermet Önel, Murat Kurt, and Aydın Öztürk. An efficient plugin for representing heterogeneous translucent materials. In Veysi İşler, Haşmet Gürçay, Hasan Kemal Süher, and Güven Çatak, editors, *Contemporary Topics in Computer Graphics and Games: Selected Papers from the Eurasia Graphics Conference Series*, chapter 18, pages 309–321. Peter Lang GmbH, Internationaler Verlag der Wissenschaften, December 2019. (Book Chapter).

REFEREED ABSTRACTS

- [31] Murat Kurt, Greg Ward, and Nicolas Bonneel. A Data-Driven BSDF Framework. In *Proceedings of the ACM SIGGRAPH 2016, Posters*, SIGGRAPH '16, pages 31:1–31:2, New York, NY, USA, July 2016. ACM.
- [32] Murat Kurt and Aydın Öztürk. A Heterogeneous Subsurface Scattering Representation Based on Compact and Efficient Matrix Factorization. In *Proceedings of the 24th Eurographics Symposium on Rendering, Posters*, EGSR '13, Zaragoza, Spain, June 2013. Eurographics Association.

TECHNICAL REPORTS

- [33] Greg Ward, Murat Kurt, and Nicolas Bonneel. A Practical Framework for Sharing and Rendering Real-World Bidirectional Scattering Distribution Functions. Technical Report LBNL-5954E, Lawrence Berkeley National Laboratory, September 2012.

THESES

- [34] Murat Kurt. *An Efficient Model for Subsurface Scattering in Translucent Materials*. International Computer Institute, Ege University, Izmir, Turkey, 2014. 122 pages, Ph.D. Dissertation.
- [35] Murat Kurt. *A New Illumination Model in Computer Graphics*. International Computer Institute, Ege University, Izmir, Turkey, 2007. 140 pages, M.Sc. Dissertation.

INVITED TALKS

- [36] Murat Kurt. Grand Challenges in BSDF Measurement and Modeling. The Workshop on Light Redirection and Scatter: Measurement, Modeling, Simulation, Lucerne, Switzerland, August 2014. (Invited Talk).

PROFESSIONAL ACTIVITIES

GUEST EDITOR

2014 Turkish Journal of Electrical Engineering & Computer Sciences.

PROGRAM COMMITTEE MEMBER

2022 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2022, Full Papers.

2021 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2021, Full Papers.

2020 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2020, Full Papers.

2019 ACM SIGGRAPH International Conference on Virtual-Reality Continuum and its Applications in Industry (VRCAI) 2019, Full Papers.

2018 SIGGRAPH Asia 2018, Courses.

2015 Eurographics 2015, STARs (State of the Art Reports).

2014 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2014, Full Papers.

2014 Global Game Jam Ege 2014.

REVIEWER FOR JOURNALS

2014 - PRESENT ACM Transactions on Graphics.

2017 - PRESENT IEEE Transactions on Visualization and Computer Graphics.

2010 - PRESENT Computer Graphics Forum.

2011 - PRESENT Computers & Graphics.

2015 - PRESENT The Visual Computer.

2014 - PRESENT Turkish Journal of Electrical Engineering & Computer Sciences.

2014 - PRESENT Signal, Image and Video Processing.

2017 - PRESENT IEEE Transactions on Mobile Computing.

2016 - PRESENT Electronics Letters.

2021 - PRESENT International Advanced Researches and Engineering Journal.
 2017 - PRESENT Computational Visual Media.
 2022 - PRESENT Erzincan University Journal of Science and Technology.

REVIEWER FOR CONFERENCES

2022 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2022.

2021 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2021.

2020 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2020.

2019 ACM SIGGRAPH International Conference on Virtual-Reality Continuum and its Applications in Industry (VRCAI) 2019.

2019 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2019.

2018 SIGGRAPH 2018.

2018 SIGGRAPH Asia 2018.

2018 IEEE Signal Processing and Communications Applications Conference (SIU) 2018.

2018 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2018.

2017 SIGGRAPH 2017.

2017 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2017.

2016 SIGGRAPH 2016.

2016 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2016.

2015 Eurographics 2015.

2015 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2015.

2014 Pacific Graphics 2014.

2014 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2014.

2013 Pacific Graphics 2013.

2013 Eurographics Symposium on Parallel Graphics and Visualization (EGPGV) 2013.

2013 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2013.

2012 Pacific Graphics 2012.

2012 International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision (WSCG) 2012.

OTHER PROFESSIONAL ACTIVITIES

2022 - PRESENT	External consultant for the undergraduate research project proposals submitted to the Scientific and Technological Research Council of Turkey (TÜBİTAK) Science Fellowships and Grant Programmes Directorate (BİDEB).
2022 - PRESENT	Consultant for the research projects supported by the Scientific and Technological Research Council of Turkey (TÜBİTAK) Academic Research Funding Programmes Directorate (ARDEB) Electrical, Electronics and Informatics Research Grant Committee (EEEAG).
2021 - PRESENT	External consultant for the project proposals submitted to the Scientific and Technological Research Council of Turkey (TÜBİTAK) Academic Research Funding Programmes Directorate (ARDEB) International Cooperation Projects Research Grant Committee (UPAG).
2021 - PRESENT	External consultant for the research project proposals submitted to the Scientific and Technological Research Council of Turkey (TÜBİTAK) Academic Research Funding Programmes Directorate (ARDEB) Electrical, Electronics and Informatics Research Grant Committee (EEEAG).
2021 - PRESENT	Inspector for the industrial R&D projects supported by the Small and Medium Enterprises Development Organization (KOSGEB) of the Republic of Turkey - Ministry of Industry and Technology.
2020 - PRESENT	External consultant for the project proposals submitted to the Scientific and Technological Research Council of Turkey (TÜBİTAK) International Cooperation Department (UIDB).
2018 - PRESENT	Referee for the assessment of the industrial research & development (R&D) project proposals submitted to the Scientific and Technological Research Council of Turkey (TÜBİTAK) Technology and Innovation Funding Programmes Directorate (TEYDEB) Information Technologies Grant Committee (BİLTEG).
2017 - PRESENT	Panelist in the evaluation meetings of the research project proposals submitted to the Scientific and Technological Research Council of Turkey (TÜBİTAK) Academic Research Funding Programmes Directorate (ARDEB) Electrical, Electronics and Informatics Research Grant Committee (EEEAG).

RESEARCH VISITS

OCT. 2014	Lucerne University of Applied Sciences and Arts, LUCERNE, SWITZERLAND. Host: Prof. Dr. Stephen Wittkopf. Description: Goniophotometer training and transmissive material modeling.
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AFFILIATIONS

JAN. 2010 - PRESENT	EUROGRAPHICS (The European Association for Computer Graphics).
SEP. 2012 - PRESENT	ACM SIGGRAPH.

LANGUAGES

TURKISH:	Native.
ENGLISH:	Fluent.

REFERENCES

AVAILABLE IF REQUESTED.