UNIVERSITAS
GADJAH MADA
Physically Based Rendering (PBR) Menggunakan Vulkan dan GLTF 2.0
Teuku Hanif Tsabit Al Azmi, Moh. Edi Wibowo, S.Kom.,M.Kom., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

DAFTAR PUSTAKA

Apers, D. (2024), Shipping Dynamic Global Illumination in Frostbite, *in* 'ACM SIGGRAPH 2024 Advances in Real-Time Rendering in Games'.

Bitterli, B., Wyman, C., Pharr, M., Shirley, P., Lefohn, A. & Jarosz, W. (2020), Spatiotemporal Reservoir Resampling for Real-Time Ray Tracing with Dynamic Direct Lighting, *in* 'ACM Transactions on Graphics (Proceedings of SIGGRAPH)', Vol. 39, ACM.

Burley, B. & Studios, W. D. A. (2012), Physically-based shading at disney, *in* 'Acm Siggraph', Vol. 2012, vol. 2012, pp. 1–7.

Cook, R. L. & Torrance, K. E. (1982), 'A Reflectance Model for Computer Graphics', *ACM Transactions on Graphics (ToG)* **1**(1), 7–24.

Corporation, N. (2024), 'RTXGI 2.0: Neural Radiance Cache and Spatial Hash Radiance Cache', `https://github.com/NVIDIA-RTX/RTXGI`. [Accessed 16-02-2026].

Corporation, N. (2025*a*), 'DLSS 4: Transforming Real-Time Graphics with AI', `https://research.nvidia.com/labs/adlr/DLSS4/`. Technical Report.

Corporation, N. (2025*b*), 'NVIDIA RTX Mega Geometry SDK', `https://github.com/NVIDIA-RTX/RTXMG`. [Accessed 16-02-2026].

Dammertz, H. (2012), 'Hammersley Points on the Hemisphere', :https://holger.dammertz.org/stuff/notes_HammersleyOnHemisphere.html.

Drobot, M. (2025), Adaptive Voxel-Based Order-Independent Transparency, *in* 'ACM SIGGRAPH 2025 Advances in Real-Time Rendering in Games'.

Estevez, A. C. & Kulla, C. (2017), Production Friendly Microfacet Sheen BRDF, *in* 'ACM SIGGRAPH'.

Failes, I. (2014), 'The vfx of Guardians of the Galaxy', `https://www.fxguide.com/fxfeatured/the-vfx-of-guardians-of-the-galaxy/`. [Accessed 15-05-2025].

UNIVERSITAS
GADJAH MADA
Physically Based Rendering (PBR) Menggunakan Vulkan dan GLTF 2.0
Teuku Hanif Tsabit Al Azmi, Moh. Edi Wibowo, S.Kom.,M.Kom., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Failes, I. (2018), 'Blade Runner 2049: going deep with DNEG', https://vfxblog.com/2018/01/04/blade-runner-2049-vfx-breakdown-joi-los-angeles/. [Accessed 15-05-2025].

Hable, J. (2024), Variable Rate Shading with Visibility Buffer Rendering, *in* 'ACM SIGGRAPH 2024 Advances in Real-Time Rendering in Games'.

Halén, H. & Brinck, A. (2021), Global Illumination Based on Surfels, *in* 'ACM SIGGRAPH 2021 Advances in Real-Time Rendering in Games'.

Heitz, E. (2014), 'Understanding the masking-shadowing function in microfacet-based BRDFs', *Journal of Computer Graphics Techniques* **3**(2), 32–91.

Heitz, E., Hanika, J., d'Eon, E. & Dachsbacher, C. (2016), 'Multiple-Scattering Microfacet BSDFs with the Smith Model', *ACM Transactions on Graphics (Proceedings of SIGGRAPH)* **35**(4), 1–14.

Iwanicki, M. (2024), Neural Light Grid: Modernizing Irradiance Volumes with Machine Learning, *in* 'ACM SIGGRAPH 2024 Advances in Real-Time Rendering in Games'.

Karis, B. & Games, E. (2013), 'Real shading in unreal engine 4', *Proc. Physically Based Shading Theory Practice* **4**(3), 1.

Kerbl, B., Kopanas, G., Leimkühler, T. & Drettakis, G. (2023), '3D Gaussian Splatting for Real-Time Radiance Field Rendering', *ACM Transactions on Graphics (TOG)* **42**(4), 1–14.

Kosarevsky, S. & Latypov, V. (2021), '3D-Graphics-Rendering-Cookbook', https://github.com/PacktPublishing/3D-Graphics-Rendering-Cookbook.

Kosarevsky, S. & Latypov, V. (2025), '3D-Graphics-Rendering-Cookbook-Second-Edition', https://github.com/PacktPublishing/3D-Graphics-Rendering-Cookbook-Second-Edition.

Kulikov, S. (2025), Strand-Based Hair and Fur Rendering in Indiana Jones and the Great Circle, *in* 'ACM SIGGRAPH 2025 Advances in Real-Time Rendering in Games'.

UNIVERSITAS
GADJAH MADA
Physically Based Rendering (PBR) Menggunakan Vulkan dan GLTF 2.0
Teuku Hanif Tsabit Al Azmi, Moh. Edi Wibowo, S.Kom.,M.Kom., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Lagarde, S. & De Rousiers, C. (2014), 'Moving Frostbite to Physically Based Rendering 3.0', *SIGGRAPH Course: Physically Based Shading in Theory and Practice* **3**.

Lagarde, S. & Harduin, L. (2013), 'The Art and Rendering of Remember Me', `https://seblagarde.wordpress.com/wp-content/uploads/2013/08/gdce13_lagarde_harduin_light.pdf`. [Accessed 15-05-2025].

Lazarov, D. (2013), 'Getting more physical in call of duty: Black ops ii', *part of "Physically Based Shading in Theory and Practice," SIGGRAPH* .

Lempinen, J. (2025), Stochastic Tile-Based Lighting in HypeHype, *in* 'ACM SIGGRAPH 2025 Advances in Real-Time Rendering in Games'.

Müller, T., Rousselle, F., Novak, J. & Keller, A. (2021), 'Real-time Neural Radiance Caching for Path Tracing', *ACM Transactions on Graphics (TOG)* **40**(4), 1–16.

Narkowicz, K. & Costa, T. (2025), MegaLights: Stochastic Direct Lighting in Unreal Engine 5, *in* 'ACM SIGGRAPH 2025 Advances in Real-Time Rendering in Games'.

Nguyen, H. (2007), *GPU Gems 3*, Addison-Wesley Professional.

Pharr, M., Jakob, W. & Humphreys, G. (2023), *Physically Based Rendering: From Theory To Implementation*, The MIT Press.

Rabby, A. & Zhang, C. (2023), 'Beyondpixels: A comprehensive review of the evolution of neural radiance fields', *arXiv preprint arXiv:2306.03000* .

Research, M. (2025), RenderFormer: Transformer-based Neural Rendering of Triangle Meshes with Global Illumination, *in* 'ACM SIGGRAPH 2025'.

Sannikov, A. (2024), 'Radiance Cascades: A Novel Approach to Calculating Global Illumination', `https://radiance-cascades.com/`. [Accessed 16-02-2026].

Seymour, M. (2016), 'Out of the pages and into The Jungle Book', `https://www.fxguide.com/fxfeatured/out-of-the-pages-and-into-the-jungle-book/`. [Accessed 15-05-2025].

UNIVERSITAS
GADJAH MADA
Physically Based Rendering (PBR) Menggunakan Vulkan dan GLTF 2.0
Teuku Hanif Tsabit Al Azmi, Moh. Edi Wibowo, S.Kom.,M.Kom., Ph.D.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

Snow, B. (2010), 'Terminators and Iron Men: Image-based lighting and physical shading at ILM', *part of "Physically Based Shading Models in Film and Game Production," SIGGRAPH* .

Sousa, T. (2025), Fast as Hell: idTech8 Global Illumination, *in* 'ACM SIGGRAPH 2025 Advances in Real-Time Rendering in Games'.

Wihlidal, G. (2024), Nanite GPU Driven Materials, *in* 'Game Developers Conference (GDC)'.

Zhang, T. (2025), Real-Time Subsurface Scattering via Hybrid ReSTIR-Path-Tracing and Diffusion, *in* 'ACM SIGGRAPH 2025 Advances in Real-Time Rendering in Games'.