

## Themenliste Seminar Computergrafik

Termin: Di, 16:00 – 18:00

- 1) J. David MacDonald and Kellogg S. Booth: Heuristics for ray tracing using space subdivision. In: The Visual Computer, 1990,  
<http://www.springerlink.com/content/j775r302k8148157/>, DOI 10.1007/BF01911006
- 2) Alexander Reshetov and Alexei Soukupov and Jim Hurley: Multi-level ray tracing algorithm. In: SIGGRAPH '05: ACM SIGGRAPH 2005 Papers, 2005,  
<http://doi.acm.org/10.1145/1186822.1073329>
- 3) Foley, Tim and Sugerman, Jeremy: KD-tree acceleration structures for a GPU raytracer. In: HWWS '05: Proceedings of the ACM SIGGRAPH/EUROGRAPHICS conference on Graphics hardware, 2005, <http://doi.acm.org/10.1145/1071866.1071869>,  
[http://graphics.stanford.edu/papers/gpu\\_kdtree/](http://graphics.stanford.edu/papers/gpu_kdtree/)
- 4) Horn, Daniel Reiter and Sugerman, Jeremy and Houston, Mike and Hanrahan, Pat: Interactive k-d tree GPU raytracing. In: I3D '07: Proceedings of the 2007 symposium on Interactive 3D graphics and games, 2007, <http://doi.acm.org/10.1145/1230100.1230129>,  
<http://graphics.stanford.edu/papers/i3dkdtree/>, <https://sourceforge.net/projects/gpuray/>
- 5) Stefan Popov and Johannes Günther and Hans-Peter Seidel and Philipp Slusallek: Stackless KD-Tree Traversal for High Performance GPU Ray Tracing. In: Computer Graphics Forum, 2007, DOI 10.1111/j.1467-8659.2007.01064.x, <http://www.mpi-inf.mpg.de/~guenther/StacklessGPURT/index.html>
- 6) Wald, Ingo and Boulos, Solomon and Shirley, Peter: Ray tracing deformable scenes using dynamic bounding volume hierarchies. In: ACM Transactions on Graphics, 2007,  
<http://doi.acm.org/10.1145/1189762.1206075>
- 7) Zhou, Kun and Hou, Qiming and Wang, Rui and Guo, Baining: Real-time KD-tree construction on graphics hardware. In: ACM Transactions on Graphics, 2008,  
<http://doi.acm.org/10.1145/1409060.1409079>
- 8) Lauterbach, C., Garland, M., Sengupta, S., Luebke, D., and Manocha, D.: Fast BVH Construction on GPUs. In: Proceedings of Eurographics, 2009,  
<http://www.cs.unc.edu/~lauterb/GPUBVH/>
- 9) Shen Dong and Michael Garland: Iterative Methods for Improving Mesh Parameterizations. In: International Conference on Shape Modeling and Applications, 2007,  
<http://doi.ieeecomputersociety.org/10.1109/SMI.2007.23>, <http://mgarland.org/papers.html>
- 10) Cook, R. L. and Torrance, K. E.: A Reflectance Model for Computer Graphics. In: ACM Transactions on Graphics, 1982, <http://doi.acm.org/10.1145/357290.357293>
- 11) Karabassi, Evangelia-Aggeliki and Papaioannou, Georgios and Theoharis, Theoharis: A fast depth-buffer-based voxelization algorithm. In: Journal of Graphics Tools, 1999,  
[www.aueb.gr/users/gepap/papers/voxeliser.pdf](http://www.aueb.gr/users/gepap/papers/voxeliser.pdf)
- 12) Crassin, Cyril and Neyret, Fabrice and Lefebvre, Sylvain and Eisemann, Elmar: GigaVoxels: ray-guided streaming for efficient and detailed voxel rendering. In: I3D '09: Proceedings of the 2009 symposium on Interactive 3D graphics and games, 2009,  
<http://doi.acm.org/10.1145/1507149.1507152>,  
<http://artis.imag.fr/Publications/2009/CNLE09/>, <http://graphics.tu-bs.de/teaching/seminars/ss09/CG/studentwebsites/MartinWahnschaffe/>
- 13) Kaufmann, Peter and Martin, Sebastian and Botsch, Mario and Grinspun, Eitan and Gross, Markus: Enrichment textures for detailed cutting of shells. In: SIGGRAPH, 2009,  
<http://doi.acm.org/10.1145/1576246.1531356>,  
<http://graphics.ethz.ch/publications/papers.php>
- 14) Gal, Ran and Sorkine, Olga and Mitra, Niloy J. and Cohen-Or, Daniel: iWIRES: an analyze-and-edit approach to shape manipulation. In: SIGGRAPH, 2009,  
<http://doi.acm.org/10.1145/1576246.1531339>,  
<http://www.cs.tau.ac.il/~galran/papers/iWires/>,

- [http://graphics.stanford.edu/~niloy/research/iwires/iwires\\_sig\\_09.html](http://graphics.stanford.edu/~niloy/research/iwires/iwires_sig_09.html)
- 15) Zhou, Kun and Huang, Xin and Xu, Weiwei and Guo, Baining and Shum, Heung-Yeung: Direct manipulation of subdivision surfaces on GPUs. In: ACM Transactions on Graphics, 2007, <http://doi.acm.org/10.1145/1276377.1276491>
- 16) Barnes, Connelly and Shechtman, Eli and Finkelstein, Adam and Goldman, Dan B: PatchMatch: a randomized correspondence algorithm for structural image editing. In: SIGGRAPH, 2009, <http://doi.acm.org/10.1145/1576246.1531330>,  
[http://www.cs.princeton.edu/gfx/pubs/Barnes\\_2009\\_PAR/index.php](http://www.cs.princeton.edu/gfx/pubs/Barnes_2009_PAR/index.php)
- 17) Lloyd, D. Brandon and Govindaraju, Naga K. and Quammen, Cory and Molnar, Steven E. and Manocha, Dinesh: Logarithmic perspective shadow maps. In: ACM Transactions on Graphics, 2008, <http://doi.acm.org/10.1145/1409625.1409628>,  
<http://gamma.cs.unc.edu/logpsm/>, <http://www.cs.unc.edu/~blloyd/dissertation/>