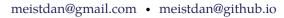
# Daniel Meister June 4, 1989





# **Education**

The Czech Technical University in Prague	Prague, Czech Republic
Ph.D. in Information Science and Computer Engineering	2014 - 2018
M.Sc. in Computer Graphics and Interaction	2012 - 2014
B.Sc. in Software Engineering	2009 – 2012

# Work Experience

Postdoctoral Researcher, The University of Tokyo	2019/9 – Present
Researcher, Czech Technical University in Prague	2017/11 - 2019/8
External Developer (Interactive Rendering System), Škoda Auto	2014/10 - 2017/3

# **Computer Skills**

 $C/C++, CUDA, OpenCL, OpenGL, OptiX, Embree, Matlab, Python, PyTorch, Bash, Git, CMake, \LaTeX$ 

#### **Research Interests**

Data Structures for Ray Tracing, Real-Time Ray Tracing, GPGPU, Parallel Computing, Global Illumination

#### Languages

Czech (native language), English (fluent), Japanese (pre-advanced - JLPT N2), French (basic knowledge) and Spanish (basic knowledge)

# **Professional Visits Abroad**

National Institute of Informatics, Japan (5 months)	2017
Vienna University of Technology, Austria (1 month)	2014

# **Teaching**

CTU Algorithms of Computer Graphics (English)	2018
CTU Algorithms of Computer Graphics (Czech)	2015

# **Awards**

JSPS Postdoctoral Fellowship (standard)	2019
Finalist of Antonín Svoboda Award for the Best Ph.D. Thesis	2019
Dean's Award (Outstanding Dissertation, Doctoral course)	2019

# **Professional Society Membership**

Upsilon Pi Epsilon Honor Society

# Reviewer

Eurographics, High-Performance Graphics, Graphical Models, IEEE Computer Graphics and Applications

#### **Publications**

- Daniel Meister, Adam Pospíšil, Imari Sato, and Jiří Bittner. Spatio-Temporal BRDF: Modeling and Synthesis. *Computers and Graphics*, 2021
- Daniel Meister, Shinji Ogaki, Carsten Benthin, Michael J. Doyle, Michael Guthe, and Jiří Bittner. A Survey on Bounding Volume Hierarchies for Ray Tracing. *Computer Graphics Forum (Proceedings of Eurographics)*, 40(2), 2021
- Daniel Meister, Jakub Bokšanský, Michael Guthe, and Jiří Bittner. On Ray Reordering Techniques for Faster GPU Ray Tracing. In *Proceedings of Symposium on Interactive 3D Graphics and Games*, 2020
- Jakub Hendrich, Adam Pospíšil, Daniel Meister, and Jiří Bittner. Ray Classification for Accelerated BVH Traversal. *Computer Graphics Forum (Proceedings of EGSR)*, 38(4):49–56, 2019
- Daniel Meister and Jiří Bittner. Parallel Reinsertion for Bounding Volume Hierarchy Optimization. *Computer Graphics Forum (Proceedings of Eurographics)*, 37(2):463–473, 2018
- Daniel Meister and Jiří Bittner. Parallel Locally-Ordered Clustering for Bounding Volume Hierarchy Construction. *IEEE Transactions on Visualization and Computer Graphics*, 24(3):1345–1353, 2018
- Jakub Hendrich, Daniel Meister, and Jiří Bittner. Parallel BVH Construction Using Progressive Hierarchical Refinement. *Computer Graphics Forum (Proceedings of Eurographics*), 36(2):487–494, 2017
- Daniel Meister and Jiří Bittner. Parallel BVH Construction Using *k*-means Clustering. *Visual Computer (Proceedings of Computer Graphics International)*, 32(6-8):977–987, 2016
- Jiří Bittner and Daniel Meister. T-SAH: Animation Optimized Bounding Volume Hierarchies. *Computer Graphics Forum (Proceedings of Eurographics)*, 34(2):527–536, 2015

#### **Invited Talks**

Bounding Volume Hierarchies for Ray Tracing, Huawei Tokyo Research Center

5/2020