

# Daniel MEISTER

\* 4th June, 1989

## CONTACT INFORMATION

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## EDUCATION

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CZECH TECHNICAL UNIVERSITY IN PRAGUE:

2014 – 2018 Ph.D. in Information Science and Computer Engineering  
2012 – 2014 M.Sc. in Computer Graphics and Interaction  
2009 – 2012 B.Sc. in Software Engineering

## WORK EXPERIENCE

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2017/11 – PRESENT Researcher, Toyota Research Lab, CTU in Prague  
2014/10 – 2017/3 External Developer (Interactive Rendering System), Škoda Auto

## LANGUAGES

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CZECH Native Language  
ENGLISH Fluent  
JAPANESE Intermediate (JLPT N3)  
FRENCH Basic Knowledge  
SPANISH Basic Knowledge

## COMPUTER SKILLS

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C/C++, CUDA, OPENGGL, SIMD, MATLAB, PYTHON, L<sup>A</sup>T<sub>E</sub>X

## RESEARCH INTERESTS

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

## PUBLICATIONS

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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

## PROFESSIONAL VISITS ABROAD

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2017   National Institute of Informatics, Japan (5 months)

2014   Vienna University of Technology, Austria (1 month)

## PROJECTS

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- 2014 – 2017 *Development Adaptive Interactive System for Increasing Safety of Vehicle Crew and its Use for Evaluation of Pavement Surface Characteristics* (TA04031769), Technology Agency of the Czech Republic, Project External Team Member
- 2014 – 2015 *Optimal Algorithms for Image Synthesis* (GAP202/12/2413), The Czech Science Foundation, Project Team Member
- 2013 – 2014 *Global Illumination for Augmented Reality in General Environments* (GAP202/11/1883), The Czech Science Foundation, Project Team Member

## TEACHING

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2015   Algorithms of Computer Graphics A4M39APG

2018   Algorithms of Computer Graphics B(E)4M39APG

## PROFESSIONAL SOCIETY MEMBERSHIP

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UPSILON PI EPSILON HONOR SOCIETY