# Daniel Meister

#### CONTACT INFORMATION

Address 7-3-1 Hongo, Buknyo-ku, Tokyo, Japan

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## **EDUCATION**

#### CZECH TECHNICAL UNIVERSITY IN PRAGUE:

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

2009 – 2012 B.Sc. in Software Engineering

#### WORK EXPERIENCE

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

# Computer Skills

C/C++, CUDA, OPENGL, SIMD, MATLAB, PYTHON, PYTORCH, SLURM, BASH, LATEX

## LANGUAGES

CZECH Native Language

English Fluent

Japanese Intermediate (JLPT N3)

French Basic Knowledge Spanish Basic Knowledge

#### Research Interests

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

### Professional Visits Abroad

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

## TEACHING

2018 Algorithms of Computer Graphics B(E)4M39APG (English) 2015 Algorithms of Computer Graphics A4M39APG (Czech)

## Awards

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

#### Professional Society Membership

UPSILON PI EPSILON HONOR SOCIETY

# **PUBLICATIONS**

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

J. Hendrich, A. Pospíšil, D. Meister, and J. 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