

Xianyao Zhang

Associate Research Scientist
DisneyResearch | Studios, Zürich, Switzerland

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Education

Ph. D. in *Computer Science*, ETH Zürich. 2019.8–2024.3
M. Sc. in *Computer Science*, ETH Zürich (with distinction). 2017.9–2019.7
B. Sc. in *Intelligence Science and Technology*, Peking University (with distinction). 2013.9–2017.7

Professional Experience

Associate Research Scientist, Rendering Group, DisneyResearch | Studios 2024.4–present
Group Lead: *Dr. Marios Papas*
Intern, Rendering Group, Disney Research Zürich 2018.4–2018.9
Mentor: *Dr. Jan Novak*
Project: **Denoising Monte-Carlo renderings with low sample counts**

Academic Experience

PhD Student, DisneyResearch | Studios and Computer Graphics Lab, ETH Zürich 2019.8–2024.3
Advisor: *Prof. Dr. Markus Gross, Dr. Marios Papas*
Thesis: **Denoising Monte Carlo Renderings: a Sub-Pixel Exploration with Deep Learning**
Master Thesis, DisneyResearch | Studios and Computer Graphics Lab, ETH Zürich 2018.11–2019.5
Advisor: *Dr. Marios Papas, Thijs Vogels and Thomas Müller*
Project: **Denoising Radiance Samples in Scene Space with Order-Independent Neural Networks**
Bachelor Thesis, Key Laboratory of Machine Perception (MoE), Peking University 2016.11–2017.6
Advisor: *Prof. Zhouchen Lin*
Project: **Fast Multiple Affine Template Matching**
Research Assistant, NELVT, Peking University 2015.12–2016.11
Advisor: *Prof. Yizhou Wang*
Project: **Video Inpainting with GAN**
Teaching Assistant, Department of Computer Science, ETH Zürich Fall 2018/19/20/22
Course: **Computer Graphics**
Teaching Assistant, Department of Computer Science, ETH Zürich Spring 2020/21/22/23
Course: **Scientific Visualization**

Publications

Xianyao Zhang, Gerhard R  thlin, Shilin Zhu, Tun   O. Aydın, Farnood Salehi, Markus Gross, Marios Papas.
Neural Denoising for Deep-Z Monte Carlo Renderings.

Computer Graphics Forum, Proceedings of Eurographics 2024 (**EG2024**, to appear).

Xianyao Zhang, Gerhard R  thlin, Marco Manzi, Markus Gross, Marios Papas.

Deep Compositional Denoising on Frame Sequences.

Eurographics Symposium on Rendering 2023 (**EGSR2023**), Industry Track.

Shilin Zhu, **Xianyao Zhang**, Gerhard R  thlin, Marios Papas, Mark Meyer.

Denoising Production Volumetric Rendering.

SIGGRAPH 2023 Talks.

Xianyao Zhang, Melvin Ott, Marco Manzi, Markus Gross, Marios Papas.

Automatic Feature Selection for Denoising Volumetric Renderings.

Computer Graphics Forum 41(4), Proceedings of Eurographics Symposium on Rendering 2022 (**EGSR2022**).

Xianyao Zhang, Marco Manzi, Thijs Vogels, Henrik Dahlberg, Markus Gross, Marios Papas.

Deep Compositional Denoising for High-quality Monte Carlo Rendering.

Computer Graphics Forum 40(4), Proceedings of Eurographics Symposium on Rendering 2021 (**EGSR2021**).

Skills

Programming

Languages: Proficient in Python, MATLAB, C/C++; familiar with HTML, JavaScript, L  T  X, CUDA

Toolboxes: TensorFlow, Dash/Plotly, OpenCV, Torch7, CGAL, Boost Graph Library.

Languages

Chinese: native

English: fluent

German: intermediate

Miscellaneous

Minesweeper world ranking #6 (highest ranking #2, PB (expert mode): 32.62s)

Awards and Honors

Willi-Studer Prize (1/150), ETH Z  rich, 2020.

Excellent Undergraduate of Beijing, Peking University, 2017.

Excellent Undergraduate Thesis, Peking University, 2017.

Founder Scholarship (top 5%), Peking University, 2014 and 2016.

Merit Student (top 5%), Peking University, 2015 and 2016.

Tung OOCL Scholarship (top 5%), Peking University, 2015.