

Jing REN

CNB G 108, Universitaetstrasse 6, 8092 Zurich, Switzerland
+41 792-1023-82 | jing.ren@inf.ethz.ch | <http://ren-jing.com/>

EDUCATION

KAUST, Visual Computing Center (VCC)

PhD in Computer Science; Supervised by Prof. Peter Wonka and Prof. Maks Ovsjanikov

Jeddah, Saudi Arabia

Aug 2015 - Jul 2021

Thesis Shape Matching and Map Space Exploration via Functional Maps

University of Oxford, St Edmund Hall

*Master of Science in Mathematical and Computational Finance with **distinction***

Oxford, United Kingdom

Sep 2014 - Jul 2015

Zhejiang University (ZJU), Chu Kochen Honors College

Bachelor of Science in Mathematics and Applied Mathematics; GPA: 3.88/4.0 (top 5%)

Zhejiang, China

Aug 2010 - Jun 2014

RESEARCH EXPERIENCE

ETH Zurich, Interactive Geometry Lab

Postdoc Researcher; Advised by Prof. Dr. Olga Sorkine-Hornung

Zurich, Switzerland

Dec 2021 - Now

Tencent, AI Lab (Digital Human)

Research Scientist

Shenzhen, China

Jul 2021 - Dec 2021

Alibaba, DAMO Academy, AI center (City Brain)

Research Intern

Zhejiang, China

Jul 2020 - Jun 2021

École Polytechnique, Laboratoire d'Informatique (LIX)

Research Intern; Advised by Prof. Maks Ovsjanikov

Palaiseau, France

Jun - Aug 2017, 2018, 2019

PUBLICATION

1 Smooth Non-Rigid Shape Matching via Effective Dirichlet Energy Optimization

Robin Magnet, Jing Ren, Olga Sorkine-Hornung, Maks Ovsjanikov

*International Conference on 3D Vision (3DV), 2022 **Best Paper Award***

2 Learning to Construct 3D Building Wireframes from 3D Line Clouds

Yicheng Luo, Jing Ren, Xuefei Zhe, Di Kang, Yajing Xu, Peter Wonka, Linchao Bao

British Machine Vision Conference (BMVC), 2022

3 Gaussian Blue Noise

Abdalla G. M. Ahmed, Jing Ren, Peter Wonka

ACM Transactions on Graphics (Proc. SIGGRAPH Asia), 2022

4 REALY: Rethinking the Evaluation of 3D Face Reconstruction

Zenghao Chai*, Haoxian Zhang*, Jing Ren, Di Kang, Zhengzhuo Xu, Xuefei Zhe, Chun Yuan, Linchao Bao

European Conference on Computer Vision (ECCV), 2022 (equal contribution)*

5 Intuitive and Efficient Roof Modeling for Reconstruction and Synthesis

Jing Ren, Biao Zhang, Bojian Wu, Jianqiang Huang, Lubin Fan, Maks Ovsjanikov, Peter Wonka

ACM Transactions on Graphics (Proc. SIGGRAPH Asia), 2021

6 Discrete Optimization for Shape Matching

Jing Ren, Simone Melzi, Peter Wonka, Maks Ovsjanikov

Computer Graphics Forum (Proc. SGP), 2021

7 Fast Sinkhorn Filters: Using Matrix Scaling for Non-Rigid Shape Correspondence with Functional Maps

Gautam Pai, [Jing Ren](#), Simone Melzi, Peter Wonka, Maks Ovsjanikov
Proc. IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021

8 Geometric analysis of shape variability of lower jaws of prehistoric humans

[Jing Ren](#), Peter Wonka, Gowtham Harihara, Maks Ovsjanikov
L'Anthropologie, 2020

9 MapTree: Recovering Multiple Solutions in the Space of Maps

[Jing Ren](#), Simone Melzi, Maks Ovsjanikov, Peter Wonka
ACM Transactions on Graphics (Proc. SIGGRAPH Asia), 2020

10 MGCN: Descriptor Learning using Multiscale GCNs

Yiqun Wang, [Jing Ren](#), Dong-Ming Yan, Jianwei Guo, Xiaopeng Zhang, Peter Wonka
ACM Transactions on Graphics (Proc. SIGGRAPH), 2020

11 Consistent ZoomOut: Efficient Spectral Map Synchronization

Ruqi Huang, [Jing Ren](#), Peter Wonka, Maks Ovsjanikov
Computer Graphics Forum (Proc. SGP), 2020

12 ZoomOut: Spectral Upsampling for Efficient Shape Correspondence

Simone Melzi*, [Jing Ren](#)*, Emanuele Rodolà, Abhishek Sharma, Peter Wonka, Maks Ovsjanikov
ACM Transactions on Graphics (Proc. SIGGRAPH Asia), 2019 (*equal contribution)

13 Structured Regularization of Functional Map Computations

[Jing Ren](#), Mikhail Panine, Peter Wonka, Maks Ovsjanikov
Computer Graphics Forum (Proc. SGP), 2019

14 Continuous and Orientation-preserving Correspondence via Functional Maps

[Jing Ren](#), Adrien Poulenard, Peter Wonka, Maks Ovsjanikov
ACM Transactions on Graphics (Proc. SIGGRAPH Asia), 2018

15 Joint Graph Layouts for Visualizing Collections of Segmented Meshes

[Jing Ren](#), Jens Schneider, Maks Ovsjanikov, Peter Wonka
IEEE Transactions on Visualization and Computer Graphics (TVCG), 2017

ACADEMIC SERVICE

Reviewer

Eurographics 2023
SIGGRAPH 2022
NeurIPS 2022
ACM TOG 2022, 2021

BMVC 2022
CGF 2022
IEEE TVCG 2021
IEEE CGA 2018

Program Committees

SIGGRAPH 2023
Pacific Graphics 2022

TEACHING

Linear Algebra @ ETH Zurich

Teaching Assistant, Autumn 2022

Shape Modeling and Geometry Processing @ ETH Zurich

Teaching Assistant, Spring 2022

STUDENT SUPERVISION

"Operator-Based Building Abstraction", Ruben Schenk @ ETH Zurich

Bachelor's Thesis Advisor, Sep 2022

"New Shape Basis for Inter-Surface Mapping", Anna Maria Egger @ ETH Zurich

Semester's Thesis Advisor, Jul 2022