

# Jing REN

No. 3464, 4700 KAUST, Thuwal, Jeddah, 23955-6900, Saudi Arabia  
+86 135-4758-8026 | [jing.ren@kaust.edu.sa](mailto:jing.ren@kaust.edu.sa) | <http://ren-jing.com/>

## EDUCATION

### KAUST, Visual Computing Center (VCC)

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

Thesis Shape Matching and Map Space Exploration via Functional Maps

Jeddah, Saudi Arabia

Aug 2015 - Jul 2021

### University of Oxford, St Edmund Hall

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

Thesis Ensemble Learning for Financial Time Series Forecasting

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

## PUBLICATION

### 1 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

### 2 Discrete Optimization for Shape Matching

Jing Ren, Simone Melzi, Peter Wonka, Maks Ovsjanikov

Computer Graphics Forum (Proc. SGP), 2021

### 3 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

### 4 Geometric analysis of shape variability of lower jaws of prehistoric humans

Jing Ren, Peter Wonka, Gowtham Harihara, Maks Ovsjanikov

L'Anthropologie, 2020

### 5 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

### 6 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

### 7 Consistent ZoomOut: Efficient Spectral Map Synchronization

Ruqi Huang, Jing Ren, Peter Wonka, Maks Ovsjanikov

Computer Graphics Forum (Proc. SGP), 2020

### 8 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)

### 9 Structured Regularization of Functional Map Computations

Jing Ren, Mikhail Panine, Peter Wonka, Maks Ovsjanikov

Computer Graphics Forum (Proc. SGP), 2019

## 10 Continuous and Orientation-preserving Correspondence via Functional Maps

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

## 11 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*

## RESEARCH INTERNSHIP

### Tencent, AI Lab

Advised by Dr. Linchao Bao, Dr. Xuefei Zhe, Dr. Di Kang

Shenzhen, China  
July 2021 - Dec 2021

### Alibaba, DAMO Academy, AI center (City Brain)

Advised by Dr. Lubin Fan

Zhejiang, China  
July 2020 - Jun 2021

### École Polytechnique, Laboratoire d'Informatique (LIX)

Advised by Prof. Maks Ovsjanikov

Palaiseau, France  
Jun - Aug 2017, 2018, 2019

## AWARDS & HONOURS

CEMSE Student Research Excellence Award

KAUST, 2020

Best Paper Award honorable mention

*Symposium on Geometry Processing, 2019*

Accomplished Honors Program of Science & Engineering

Zhejiang University, 2014

Scholarship for Outstanding Merits (top 8%)

Zhejiang University, 2011, 2012, 2013

Excellent Student Awards (top 3%)

Zhejiang University, 2011

## SKILLS & ACTIVITIES

**Programming Skills** MATLAB, Python, C++, R

**Languages** Mandarin (Native); English (Fluent); Russian (Beginner)

### Voluntary Activities

- Translator in *Coursera's Global Translator Community* Sep 2016 - Present
- Student Volunteer of *ACM MultiMedia* Oct 2020
- Paper reviewer of *IEEE Computer Graphics and Applications* Jun 2018
- Student Volunteer of *The Symposium on Geometry Processing 2018* Jul 2018
- Volunteered at *China Knives, Scissors and Swords Museum* Oct 2012 - Jun 2014

## SCIENTIFIC REFEREES

### Prof. Peter Wonka

Full Professor, Visual Computing Center, KAUST

✉ peter.wonka@kaust.edu.sa

☎ +966 (0) 12 808 0235

🌐 <http://peterwonka.net/>

### Prof. Maks Ovsjanikov

Full Professor, École Polytechnique

✉ maks@lix.polytechnique.fr

☎ +33 (0) 1 77 57 80 11

🌐 <http://www.lix.polytechnique.fr/~maks/>

### Prof. Helmut Pottmann

Full Professor, Visual Computing Center, KAUST

✉ helmut.pottmann@gmail.com

🌐 <https://www.kaust.edu.sa/en/study/faculty/helmut-pottmann>