

RAN ZHANG

Ph.D. student & Computer Graphics researcher

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✉ Am Campus 1, 3400 Klosterneuburg, Austria

📍 Klosterneuburg, Austria

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EDUCATION

Ph.D. student in Bickel's Group

IST Austria

📅 Sept. 2014 -

📍 Klosterneuburg, Austria

- Supervisor: Prof. Bernd Bickel
- Research topics: Computer graphics and digital fabrication, especially in fabrication-aware computational design.

M.Sc. in Electronic Engineering

University of Science and Technology of China

📅 Sept. 2011 - Jun. 2014

📍 Hefei, China

- Supervisor: Prof. Xuejin Chen and Prof. Ligang Liu
- Research topics: Computer graphics, especially in non-rigid registration and deployable scissor structures.

B.Sc. in Electronic Engineering

Tianjin University

📅 Sept. 2007 - Jun. 2011

📍 Tianjin, China

EXPERIENCE

Research intern

Microsoft Research Asia

📅 Aug. 2018 -

📍 Beijing, China

- Work with: Dr. Yang Liu
- Research topics: Computational design.

Exchange student

University College London

📅 Mar. 2017 - May 2017

📍 London, UK

- Work with: Prof. Niloy Mitra
- Research topics: Computational fabrication of ruled surface with strings.

Exchange student

University College London

📅 Sept. 2016 - Oct. 2016

📍 London, UK

- Work with: Prof. Tim Weyrich
- Research topics: Measurement system of 3D printed translucent material.

Research intern

Microsoft Research Asia

📅 Sept. 2013 - Jan. 2014

📍 Beijing, China

- Work with: Dr. Xin Tong
- Research topics: Non-rigid registration using distance field.

RESEARCH INTERESTS



Computational Design

Assisting novice users for designing sophisticated structures.



Creative Coding

Linking tech and art.

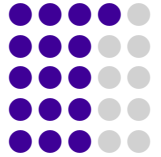


Fun with geometry

Cool applications with geometry processing techniques.

TECH STACKS

C++
CUDA
Matlab
R
Latex



Eigen

Libigl

Cinder

OpenGL

Dear ImGui

Git

LANGUAGES

Mandarin Chinese



English



HOBBIES

E-sports games

Table tennis

PUBLICATIONS

Journal Articles

- Kazutaka Nakashima, Thomas Auzinger, Emmanuel Iarussi, **Ran Zhang**, Takeo Igarashi, and Bernd Bickel. “**CoreCavity: Interactive Shell Decomposition for Fabrication with Two-Piece Rigid Molds**”. In: *ACM Transactions on Graphics (Proceedings of SIGGRAPH 2018)* 37.4 (2018), 135:1–135:13. DOI: 10.1145/3197517.3201341. URL: <https://dx.doi.org/10.1145/3197517.3201341>.
- Oskar Elek, Denis Sumin, **Ran Zhang**, Tim Weyrich, Karol Myszkowski, Bernd Bickel, Alexander Wilkie, and Jaroslav Krivánek. “**Scattering-aware Texture Reproduction for 3D Printing**”. In: *ACM Transactions on Graphics (Proceedings of SIGGRAPH Asia 2017)* 36.6 (2017), 241:1–241:15. URL: <http://visualcomputing.ist.ac.at/publications/2017/TexFab/>.
- **Ran Zhang**, Thomas Auzinger, Duygu Ceylan, Wilmot Li, and Bernd Bickel. “**Functionality-aware Retargeting of Mechanisms to 3D Shapes**”. In: *ACM Transactions on Graphics (Proceedings of SIGGRAPH 2017)* 36.4 (July 2017). DOI: 10.1145/3072959.3073710. URL: <http://visualcomputing.ist.ac.at/publications/2017/MechRet/>.
- **Ran Zhang***, Shiwei Wang*, Xuejin Chen, Chao Ding, Luo Jiang, Jie Zhou, and Ligang Liu. “**Designing Planar Deployable Objects via Scissor Structures**”. In: *IEEE Transactions on Visualization and Computer Graphics* 22.2 (Feb. 2016), pp. 1051–1062. ISSN: 1077-2626. DOI: 10.1109/TVCG.2015.2430322. URL: <http://staff.ustc.edu.cn/~xjchen99/scissor.html>.
- **Ran Zhang**, Xuejin Chen, Takaaki Shiratori, Xin Tong, and Ligang Liu. “**An efficient volumetric method for non-rigid registration**”. In: *Graphical Models* 79 (2015), pp. 1–11. ISSN: 1524-0703. DOI: <https://doi.org/10.1016/j.gmod.2015.01.003>. URL: <http://www.sciencedirect.com/science/article/pii/S1524070315000053>.

ACTIVITIES

Paper contributor

SIGGRAPH 2018

 August 2017

 Vancouver, Canada

Oral presenter

SIGGRAPH 2017

 July 2017

 Los Angeles, U.S.A.

Attendee

Symposium Geometry Processing(SGP) 2015

 July 2015

 Graz, Austria

Oral presenter

Geometric Modeling and Processing(GMP) 2014

 June 2015

 Singapore, Singapore

Attendee


Geometric Modeling and Processing(GMP) 2012

 June 2012

 Huangshan, China

Attendee

International Conference on Image and Graphics(ICIG)

 August 2011

 Hefei, China