

# Hui Wang

School of Mathematical Sciences, Dalian University of Technology (DUT), Dalian, China

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## Research Interest

My research interests mainly lie in architectural geometry, computational geometry, differential geometry, etc.

## Education

### TU Wien

Joint PhD (supported by CSC) in Institute of Discrete Mathematics and Geometry

Supervisor: Prof. Helmut Pottmann

*Vienna, Austria*

*Sep. 2017 - Oct. 2019*

### Dalian University of Technology

PhD in School of Mathematical Sciences

Supervisor: Prof. Chungang Zhu

*Dalian, China*

*Sep. 2015 - PRESENT*

### Dalian University of Technology

MS in School of Mathematical Sciences

Supervisor: Prof. Zhonghua Hou

*Dalian, China*

*Sep. 2013 - Oct. 2015*

### Jilin Normal University

BS in Mathematics and Applied Mathematics

*Siping, China*

*Sep. 2009 - Oct. 2013*

## Publication

### ○ Architectural Freeform Surfaces Designed for Cost-effective Paneling Through Mold Re-use

Advances in Architectural Geometry (AAG), 2020.

2020

Davide Pellis, Martin Kilian, **Hui Wang**, Caigui Jiang, Christian Müller, Helmut Pottmann.

### ○ Principal Symmetric Meshes

ACM Trans. Graphics, SIGGRAPH, 2020.

2020

Davide Pellis\*, **Hui Wang\***, Martin Kilian, Florian Rist, Helmut Pottmann, Christian Müller (\*joint first author).

### ○ Discrete Geodesic Parallel Coordinates

ACM Trans. Graphics, SIGGRAPH ASIA, 2019.

2019

**Hui Wang**, Davide Pellis, Florian Rist, Helmut Pottmann, Christian Müller.

### ○ Design and Construction of Curved Support Structures with Repetitive Parameters

Advances in Architectural Geometry (AAG), 2018.

2018

Eike Schling, Martin Kilian, **Hui Wang**, Jonas Schikore, and Helmut Pottmann.

### ○ Curved Support Structures and Meshes with Spherical Vertex Stars

ACM Trans. Graphics, SIGGRAPH Poster, 2018.

2018

Martin Kilian, **Hui Wang**, Eike Schling, Jonas Schikore, and Helmut Pottmann.

### ○ Construction of B-spline surface from Cubic B-spline Asymptotic Quadrilateral

Journal of Advanced Mechanical Design, Systems, and Manufacturing (JSME).

2017

**Hui Wang**, Chungang Zhu, and Caiyun Li.

### ○ The Design of Bézier Surface Through Quintic Bézier Asymptotic Quadrilateral

Journal of Computational Mathematics (JCM).

2017

**Hui Wang**, Chungang Zhu, and Caiyun Li.

### ○ Construction of Rational Bézier Surface Interpolating Asymptotic Quadrilateral

Jisuanji Fuzhu Sheji Yu Tuxingxue Xuebao/Journal of Computer-Aided Design and Computer Graphics.

2017

**Hui Wang**, Chungang Zhu, and Caiyun Li.

### ○ Identification of Planar Sextic Pythagorean-Hodograph Curves

Journal of Mathematical Research with Applications.

2016

**Hui Wang**, Chungang Zhu, and Caiyun Li.

○  $G^2$  Hermite Interpolation by Pythagorean Hodograph of Degree Six

Journal of Graphics.

2016

Hui Wang, Chungang Zhu, and Caiyun Li.

## Conference and Selected Talks

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○ **SIGGRAPH ASIA 2019**

[Brisbane, Australia](#)

Discrete Geodesic Parallel Coordinates

Nov.17-20 2019

Presenter

○ **Fifth Symposium on Geometry and Computational Design(GCD) 2018**

[Vienna, Austria](#)

TU Wien

Oct.25, 2018

Attendee

○ **Advances in Architectural Geometry (AAG) 2018**

[Gothenburg, Sweden](#)

Chalmers University of Technology

Sep.22-25, 2018

Attendee

○ **Fourth Symposium on Geometry and Computational Design(GCD) 2017**

[Vienna, Austria](#)

TU Wien

Nov.17, 2017

Attendee

○ **Computer Mathematics (CM) 2016**

[Shenzhen, China](#)

Construction of Bezier Surface by Bezier Asymptotic Quadrilateral

Nov.11-13, 2016

Presenter (in Chinese)

○ **Asian Conference on Design and Digital Engineering 2016**

[Jeju, Korea](#)

Construction of B-spline Surface from Cubic B-spline Asymptotic Quadrilateral

Oct.25-28, 2016

Presenter

○ **International Conference on Information and Computational Science (ICICS) 2016**

[Dalian, China](#)

Dalian University of Technology

Aug.2-6, 2016

Attendee

○ **CSIAM Geometric Design and Computing (GDC) 2016**

[Hefei, China](#)

University of Science and Technology of China

July 16-18, 2016

Attendee

○ **CSIAM Geometric Design and Computing (GDC) 2015**

[Hangzhou, China](#)

$G^2$  Hermite Interpolation by Pythagorean Hodograph of Degree Six

Aug.22-24, 2015

Presenter (in Chinese)

## Skills

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○ **Programming:** Python, Matlab, Maple

○ **Software Tools:** Rhinoceros, Blender, GIMP, Meshlab

○ **Language:** Chinese (native), English, German (beginner)

## Reference

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○ **Prof. Helmut Pottmann:** Full Professor, KAUST and TU Wien, Austria.

○ **Ass.Prof. Christian Müller:** Assistant Professor, TU Wien, Austria.

○ **Dr. Martin Kilian:** Assistant, TU Wien, Austria.

○ **Dr. Davide Pellis:** Assistant, TU Wien, Austria.

○ **Prof. Chungang Zhu:** Full Professor, DUT, China.

○ **Prof. Zhonghua Hou:** Full Professor, DUT, China.

○ **Ass.Prof. Caiyun Li:** Associate Professor, DUT, China.