Tianli Liao March 21, 2022

College of Information Science and Engineering Henan University of Technology No. 100 Lianhua Street, Zhengzhou High-Tech Development Zone Henan, 450001, China

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#### Education

Nankai University

Tianjin, China *2013 - 2019* 

Ph.D. in Applied Mathematics

- Advisor: Yongchuan Chen

- Thesis: Research on Perception-based Strategies for Image Stitching

Wuhan University
B.S. in Mathematics

Wuhan, China 2009 - 2013

# Research Interests

Computer Vision; Machine Learning; Image Processing

- Image and video stitching
- View synthesis
- Style transfer
- Multi-view geometry

## **Professional Activities**

- Reviewer, Signal, Image and Video Processing (SIViP)
- Reviewer, IEEE Transactions on Geoscience and Remote Sensing (TGRS)
- Reviewer, Machine Vision and Applications (MVA)
- Reviewer, IEEE Transactions on Image Processing (TIP)

## **Funded Projects**

• Principal Investigator, Research on Panoramic Image Stitching Method for Large Parallax Scene, Natural Science Foundation of Henan Province, 2022-2023, CHY 50,000

#### Honors & Awards

- Merit Scholarship for Students, School of Mathematics and Statistics, Wuhan University, December, 2012
- Merit Scholarship for Students, School of Mathematics and Statistics, Wuhan University, December, 2011
- Merit Scholarship for Freshman Students, Wuhan University, December, 2009

## **Projects**

• Front-facing Panoramas Techniques Algorithm (with HUAWEI Technologies Co., Ltd.), 2015

## **Publications**

#### Journal Papers

(\* indicates corresponding author)

- Single-Perspective Warps in Natural Image Stitching **Tianli Liao** and Nan Li *IEEE Transactions on Image Processing* (**TIP**), 29, 724-735 (2020).
- Quality evaluation-based iterative seam estimation for image stitching **Tianli Liao**, Jing Chen and Yifang Xu Signal, Image and Video Processing (SIViP), 13(6), 1199-1206 (2019).
- Learning-based Natural Geometric Matching with Homography Prior Yifang Xu, **Tianli Liao** and Jing Chen *Electronics Letters*, 54(23), 1328-1330 (2018).
- Perception-based seam cutting for image stitching Nan Li, **Tianli Liao\*** and Chao Wang Signal, Image and Video Processing (SIViP), 12(5), 967-974 (2018).