# Resume of Teng XIAO

## **Basic Information**



School : Gender: Date of Birth: Title: Education: Tutor: Email: Interest of research: School of Computer Science Male 1990.06 Lecturer Ph.D of Engineering Master degree xiao@hbut.edu.cn Computer graphics and image

processing

## Academic Background

From September 2009 to July 2013, Wuhan University, Bachelor's degree in Surying and Mapping Engineering;

From September 2013 to July 2016, Wuhan University, Master's degree of Photogrammetry and Remote Sensing;

From September 2016 to July 2021, Wuhan University, Ph.D of Photogrammetry and Remote Sensing.

#### **Oversea visiting**

2018/12-2019/12, Visitting PhD student, Leibniz University Hannover, Germany;

#### **Enrollment Information**

- 1. Enrollment Discipline: Master of Engineering
- 2. Research direction: Intelligent application technology in computer vision
- 3. Enrollment Year: 2023-2024

## **Representative Projects**

1. National Natural Science Foundation of China "Research on Disambiguating Repetitive Structures in 3D Reconstruction from Aerial and Ground Images", China, Project leader.

2. Hubei Key Research and Development Project "Key technologies of multi-source data intelligent 3D modeling for virtual reality ", Hubei Province, Project leader.

3. HBUT scientific research start-up project "Visual-inertial Fusion method in Quadruped Robot for Indoor 3D Reconstruction ", Project leader.

## **Representative Articles**

1. Xiao T, Wang X, Mei X, Ye Z, Yan Q, Deng F (2023). Robust Merging of Subblock

Reconstructions for Parallel Structure from Motion. Acta Geodaetica et Cartographica Sinica (Chinese edition). accepted.

- Xiao T (2023).Research on robust structure from motion via optimizing view-graph. Acta Geodaetica et Cartographica Sinica (Chinese edition). 52(6), 1042.
- Xiao T, Guo S, Wu L, Yan Q, Deng F. (2023). A Criterion of Radial Distortion on Structure from Motion with Consumer-Grade Cameras. The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 48, 383-385.
- 4. Wu L, Xiao T, Li H, Deng F. (2023). A Distributed Bundle Adjustment Method Using Iterative Motion Averaging. The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 48, 379-381.
- 5. Wang C, Xiao T, Gong Z, Yang S, Zhang D, Deng F. (2023). Wireless Binocular Stereovision Measurement System Based on Improved Coarse-to-Fine Matching Algorithm. Structural Control and Health Monitoring, 2023.
- 6. Qu Y, Yan Q, Yang J, Xiao T, Deng F (2022).Total differential photometric mesh refinement with self-adapted mesh denoising.Photonics.2022,10(1).
- Wan F, Sun C, He H, Lei G, Xu L, Xiao T (2022).YOLO-LRDD: A Lightweight Method for Road Damage Detection Based on Improved YOLOv5s. EURASIP Journal on Advances in Signal Processing, 2022(98):1-18.
- 8. Xiao T, Yan Q, Ma W, Deng F (2021). Progressive structure from motion by iteratively prioritizing and refining match pairs. Remote Sensing, 13(12):2340.
- Xiao T, Wang X, Deng F, Heipke C (2021). Sequential cycle consistency inference for eliminating incorrect relative orientations in structure from motion. PFG–Journal of Photogrammetry, Remote Sensing and Geoinformation Science, pp.1–17.
- 10. Wang X, Xiao T, Kasten Y (2021). A hybrid global structure from motion method for synchronously estimating global rotations and global translations. ISPRS Journal of Photogrammetry and Remote Sensing, 174:35–55.
- 11. Deng F, Yan Q, Xiao T (2020). A GPU-PatchMatch multi-view dense matching algorithm based on parallel propagation. Acta Geodaetica et Cartographica Sinica (Chinese edition), 48(06):22-31.
- Wang X, Xiao T, Gruber M, Heipke C (2019). Robustifying relative orientations with respect to repetitive structures and very short baselines for global SfM. In Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition Workshops.