

# Yiguo Qiao

## Curriculum Vitae

Department of Computer Science, University of Bath  
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## Work Experience

2019–now **Research Associate**, Department of Computer Science, University of Bath, England.

## Education

- 2011–2018 **Ph.D. at Xidian University**, School of Artificial Intelligence, Xi'an, China.  
Doctor of Philosophy in Circuits and Systems  
Dissertation: "*Depth Super-resolution and Virtual View Synthesis in 3D Stereoscopic Vision*"  
Advisors: Prof. Licheng Jiao (*Fellow, IEEE*) and Prof. Jin Pan
- 2010–2011 **Master's degree at Xidian University**, Key Laboratory of Intelligent Perception and Image Understanding of Ministry of Education, Xi'an, China.  
Master of Science in Pattern Recognition and Intelligent Systems  
Advisors: Prof. Licheng Jiao (*Fellow, IEEE*) and Prof. Jin Pan
- 2006–2010 **Bachelor's degree at Xidian University**, School of Electronic Engineering, Xi'an, China.  
Bachelor of Science in Automation  
Dissertation: "*Research and Development of Integrated System of ERP and MES*"

## Research Experience

- 2021–now *Research on Unsupervised Motion Retargetting in Motion Capture*, **Researcher**, University of Bath.
- 2019–2021 *Development of Rheumatoid Arthritis Flare Profiler*, **Researcher**, University of Bath, healthtech company Living With, and Royal United Hospitals Bath NHS Foundation Trust (RUH).
- 2012–2014 *Research on Elimination of Coding Effect and Generation of High Quality Binocular View in 3DTV*, **Co-investigator**, Xidian University.
- 2012–2013 *Research on Video Processing Technologies in 3DTV*, **Co-investigator**, Xidian University and Huawei Technologies Co. Ltd.

## Publications

### Peer-reviewed publications

- 2020 **Yiguo Qiao**, Licheng Jiao, Xu Tang, Wenbin Li and Darren Cosker, "*High-quality depth up-sampling via a supervised classification guided MRF model*", **Pattern Recognition Letters**.

- 2019 **Yiguo Qiao**, Licheng Jiao, Shuyuan Yang, Biao Hou and Jie Feng, "*Color Correction and Depth-Based Hierarchical Hole Filling in Free Viewpoint Generation*", **IEEE Transactions on Broadcasting**.
- 2018 **Yiguo Qiao**, Licheng Jiao, Shuyuan Yang and Biao Hou, "*A novel segmentation based depth map up-sampling*", **IEEE Transactions on Multimedia**.  
**Yiguo Qiao**, Licheng Jiao and Biao Hou, "*High-quality depth up-sampling based on multi-scale SLIC*", **Electronics Letters**.
- 2014 **Yiguo Qiao** and Cheolkon Jung, "*Dictionary based Hole Filling with Assistance of Depth*", **Proc. IEEE Intl. Conf. on Multimedia and Expo (ICME), 2014, (Oral)**.

#### Papers under review

1. Anonymous Author(s), "*The relationship between grip strength and RAPID3 (Routine Assessment of Patient Index Data 3) in patients with rheumatoid arthritis and short-term prediction of disease condition using LSTM (Long Short Term Memory) network*".
2. Anonymous Author(s), "*Joint segmentation on thermal image and relationship analysis between hand temperature and RAPID3 for follow-up of Rheumatoid Arthritis*".
3. Anonymous Author(s), "*Fast, High-Quality Hierarchical Depth-Map Super-Resolution*".

#### Patents

1. L. Jiao, **Y. Qiao**, et al., "*A Color Correction based Free Viewpoint Generation Method*", China, 201610334492.7[P], authorized in 2018-03-13.
2. C. Jung, L. Jiao, F. Xue, T. Sun, **Y. Qiao**, "*A Parallax Minimal Perceptible Model based Stereo Video Coding Method*", China, 201410240167.5[P], authorized in 2018-05-22.
3. L. Jiao, **Y. Qiao**, et al., "*A minimum joint distance based depth map up-sampling method*", China, 201610334077.1[P], authorized in 2019-04-23.

#### Technical Skills

Programming Python, MATLAB, HTML, css, C/C++  
 Others L<sup>A</sup>T<sub>E</sub>X, Lyx, TeXworks, SPSS, Blender, Unity, Docker, Microsoft Office Tools, Mendeley

#### Languages

Chinese (native), English (intermediate)

#### Leisure and Entertainment

Singing, Playing Ukulele and Piano, Traveling, etc.