

# 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 and Trinity College Dublin.
- 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).
- 2013–2016 *Research on Elimination of Coding Effect and High Quality Binocular View Generation in 3DTV*, **Co-investigator**, Xidian University.
- 2012–2013 *Technologies of Video Processing in 3DTV*, **Co-investigator**, Xidian University and Huawei Technologies Co. Ltd.

## Publications

### Peer-reviewed publications

- 2021 **Yiguo Qiao**, Licheng Jiao, Wenbin Li, Christian Richardt and Darren Cosker, *Fast, High-quality Hierarchical Depth-map Super-resolution*, [ACM International Conference on Multimedia \(ACM MM\)](#), 2021. ([Full paper](#)).

- 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. \(Full paper\)](#).

### Papers in progress

1. Anonymous Author(s), *Can people tell the differences between the quadruped with real motion from the one being motion retargeted?*
2. 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.*
3. Anonymous Author(s), *Joint segmentation on thermal image and relationship analysis between hand temperature and RAPID3 for follow-up of Rheumatoid Arthritis.*

## 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, Photography, Traveling, etc.