Yiguo Qiao

Curriculum Vitae

Department of Computer Science, University of Bath Claverton Down, Bath BA2 7AY, United Kingdom ⊠ yiguo.qiao@bath.edu "≜ yiguoqiao.github.io/



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

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).

- 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.
- 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.
- 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*.
- 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 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 LaTeX, 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.