Mingze **YUAN**

Computer Graphics, Computer Vision, Machine Learning

Claverton Down, Bath BA2 7AY, England, UK
+44-7562077986 @ yuanmingze2014@gmail.com
yuanmingze.github.io Google Scholar

Research Experience

Present – **Research Software Engineer**– Department of Computer Science, University of Bath, UK
Sep. 2019 **Line Manager** *: Christian Richard*

- Researched on new viewpoint image synthetic method
- Developed the 6DoF image base rendering project
- Developed panoramic RGBD and optical flow data synthesis project

Virtual Reality | SLAM | Image Based Rendering

Jun. 2019 – **Research Assistant**– Institute of Computing Technology, Chinese Academy of Sciences , P.R. China
May. 2014 **Advisors** *: Shihong Xia, Lin Gao*

- Researched on temporal upsampling of depth maps
- Researched on RGB-D scene flow methods using optimization and CNN based approach
- Researched on 3D model deformation and registration
- Developed face detection, alignment and recognition algorithm
- Built a real-world RGB-D dataset with the goal to evaluation of depth temporal upsampling

RGB-D Image Processing | Optical Flow | Geometry Registration | Motion capture

Education

2014- 2019 – **Ph.D. in Computer Science**, University of Chinese Academy of Sciences (UCAS), P.R.China

- Dissertation : Temporal Upsampling of Depth Maps Using a Hybrid Camera, Supervisor : Shihong Xia

2011 - 2014 – **Master in Computer Science**, 15th Research Institute of China Electronics Technology Group Corporation (CETC 15), P.R.China

2007 - 2011 – **Bachelor in Computer Science** , University of Electronic Science and Technology of China (UESTC), P.R.China

Publications

Journal

J1. OmniPhotos : Casual 360° VR Photography with Motion Parallax
Tobias Bertel, **Mingze Yuan**, Reuben Lindroos, Christian Richardt
ACM Transactions on Graphics (Proceedings of SIGGRAPH Asia),39(6),2020

J2. Temporal upsampling of depth maps using a hybrid camera
Mingze Yuan, Lin Gao, Hongbo Fu, and Shihong Xia.
IEEE Transactions on Visualization and Computer Graphics (**TVCG**), 25(3), 2018

J4. Facial Feature Points Tracking System and Simulation Analysis
Mingze Yuan, and Shihong Xia
Journal of System Simulation,30 (12), 2018

J3. A survey on human performance capture and animation
Shihong Xia, Lin Gao, Yukun Lai, **Mingze Yuan**, and Jinxiang Chai
Journal of Computer Science and Technology, 32 (3), 2017

Conference

C1. SF-Net : Learning scene flow from RGB-D images with CNNs
Yi-Ling Qiao, Lin Gao, Yukun Lai, Fang-Lue Zhang, **Mingze Yuan** and Shihong Xia
British Machine Vision Conference (**BMVC**) 2018

C2. A Marker-less Motion Capture Method Combining Body Capture and Face Capture
Zhiyong, Wang, Congyi Wang, Zihao Zhang, **Mingze Yuan**, Shihong Xia
Chinagraph 2018

Honors and Awards

2018 The First-Class Prize of China Computer Federation (CCF) Science and Technology Award for Technical Invention, "Key Technology and Application of 3D Human Motion Modeling'
2018 UCAS - E Funda Financial Technology Scholarship
2018 Pacemaker to Merit Student of UCAS
2015 Outstanding Volunteer of CCF

Skills

Programming	C++/C, Python, LaTeX, Matlab, HTML, SQL, Java, JavaScript, Assembly
Development Tools	GCC, GDB, Vim, Visual studio, Eclipse, SVN, Git
Multimedia Tools	Blender, GIMP, Inkscape, Adobe Premiere/Encoder/Photoshop, Ffmpeg
Machine Learning Framework	Caffe, TensorFlow
Misc.	Computer Architecture, Principles of Operating System