# Ming-Ze **YUAN**

## Computer Graphics, Computer Vision, Machine Learning | Ph.D.

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## Education

**Sep. 2014 – Present** | **University of Chinese Academy of Sciences (UCAS)**, Beijing, P.R.China
- Ph.D. Candidate in Computer Science, Expected July 2019
- Advisor : Prof. Shihong Xia

**Sep. 2011 – Sep. 2014** | **15th Research Institute of China Electronics Technology Group Corporation (CETC 15)**, Beijing, P.R.China
- M.S. in Computer Science
- Advisor : Prof. Fuzhen Hao

**Sep. 2007 – Sep. 2011** | **University of Electronic Science and Technology of China (UESTC)**, Chengdu, P.R.China
- B.Eng. in Computer Science

## Publications

### Journal

**J1. Temporal upsampling of depth maps using a hybrid camera**
**Ming-Ze Yuan**, Lin Gao, Hongbo Fu, and Shihong Xia.
IEEE Transactions on Visualization and Computer Graphics (**TVCG**), 2019

**J2. A survey on human performance capture and animation**
Shihong Xia, Lin Gao, Yukun Lai, **Ming-Ze Yuan**, and Jinxiang Chai
Journal of Computer Science and Technology, 32 (3), 536-554.

**J3. Facial Feature Points Tracking System and Simulation Analysis**
**Ming-Ze Yuan**, and Shihong Xia
Journal of System Simulation, 2018,30 (12),4618-4624

### Conference

**C1. SF-Net : Learning scene flow from RGB-D images with CNNs**
Yi-Ling Qiao, Lin Gao, Yukun Lai, Fang-Lue Zhang, **Ming-Ze 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, **Ming-Ze Yuan**, Shihong Xia
Chinagraph 2018

## Research & Engineering Experience

**Present – May. 2014** | **Institute of Computing Technology (ICT), Chinese Academy of Sciences (CAS)**, Beijing, P.R. China
*Research Assistant* **Advisors** : Prof. Shihong Xia, Prof. Lin Gao
- Researched on temporal upsampling of depth maps
- Researched on RGB-D scene flow methods using optimization and CNN based approache
- 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 Upsampling | Scene Flow | Optical Flow | Geometry Registration | Motion capture

May. 2014 | **CETC 15**, Beijing, P.R. China
Sep. 2011 | *Research Assistant* **Supervisor** : Prof. Fuzhen Hao

- Developed 2D barcode coding and recognition method
- Developed Enterprise Service Bus (ESB) for Enterprise Resource Planning (ERP) System
- Researched on theoretical model of supply chain strategies

Barcode Encoding | Enterprise Service Bus (ESB)

May. 2011 | **UESTC**, Chengdu, P.R. China
Sep. 2007 | *Research Assistant* **Supervisor** : Prof. Guiduo Duan

- Developed digital watermarking algorithm for verifying the authenticity of image
- Developed embedded microsystem based on $\mu$C/OS-II and TI MSP430

Image Processing | Computer Architecture

## Patents

- Method and system of face animation generation driven by text voice, CN201510876078
- Method and system for deducing sudden event situation based on case, CN201510398451

## 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

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|---|---|
| **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 |

## References

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**Prof. Lin Gao**
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**Prof. Hongbo Fu**
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